

SUMMARY  
OF THE  
IMPROVEMENTS AND DISCOVERIES  
IN THE  
MEDICAL SCIENCES.

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ANATOMY AND PHYSIOLOGY.

1. *Functions of the Lacteals and of the Veins.*—M. CHATIN's experiments were made for the purpose of ascertaining whether poisonous substances were introduced into the circulation by means of the veins, or by that of the lacteals.

1. Eight dogs were poisoned by introducing into their stomachs a large dose of arsenic, mixed with milk, and then tying the œsophagus. The blood of all these animals, both that extracted from the heart and from the large vessels, was incinerated with nitrate of potash. The product of the incineration furnished, by means of the apparatus of Marsh, a distinct ring, and spots of arsenic, which, on being subjected to the proper tests, furnished all the characters of that metal. The chyle collected from the thoracic duct of these eight dogs, added together, and treated in the same manner as the blood, yielded not the slightest trace of arsenic.

2. Like experiments were made on dogs by substituting tartar-emetic for the arsenic. The animals were killed about an hour after the administration of the poison by opening the carotid arteries. The antimony was found in the blood, but not even a trace in the chyle.

3. A quantity of blood abstracted from different individuals, who had been taking antimony in large doses, furnished a notable quantity of that metal.—*Ed. Med. & Surg. Journ.*, from *Comptes Rendus des Sc. de l'Acad. R. des Sc., &c.*, March 4, 1844.

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2. *On the Development of Animalculæ in the Alimentary Canal during Digestion.*—It appears, from the researches of MM. GRUBBY and DELAFOND, that in a very great number of animals, the process of digestion is accompanied by the development of infusory animalculæ within the stomach and intestines. Four species were met with in the Ruminantia; seven in the horse; two in the dog; but only one in the hog. These animalculæ exist in such numbers that in the sheep it was reckoned that not less than from 18 to 30 ounces in weight of them were present,—a quantity very nearly equal to a fifth part of the fluid in which they swim. These infusoria are seen alive in prodigious quantity in the first and second stomachs of the Ruminantia; but in the third and fourth stomachs of these animals their carapaces or crustaceous envelopes are alone seen. In the horse, however, they are found alive throughout the whole length of the intestinal tube, excepting in the narrowed part of the colon and the rectum. From these facts MM. Gruby and Delafond conclude, that these animalculæ are digested in the fourth stomach (caillette) of the Ruminantia, and in the colon of the horse, and that both of these organs thus furnish a nutritive animal juice. They also infer that a fifth part of the vegetable matters introduced into the stomach of the herbivorous animals is destined to produce infusoria, which, digested in their turn, furnish animal matters to the general nutritive materials, and that this conclusion appears to receive a strong degree of probability from

the circumstance, that in carnivorous or omnivorous animals, as the dog and pig, the infusoria are not only much less numerous and smaller in size, but consist of only one or two species.—*Ibid.* from *Ibid.*, December 11, 1813.

3. *Influence of the Eighth Pair of Nerves on the Chemical Phenomena of Digestion.*—A paper was read May 27th on this subject, to the Academy of Sciences, by M. BERNARD, who proposed, in a series of experiments, to inquire, in a more precise manner than has hitherto been done, into the part which we ought to attribute to the influence of the pneumogastric nerves in the act of chymification. It is well known that authors are not agreed as to the precise property which these nerves enjoy in the digestive process, and that many points of this question are a matter of controversy. The different and frequently contradictory results arrived at depending on the difficulties of observation, M. Bernard was of opinion that if the functions of the stomach could be performed under our own eyes, the study of these phenomena would be facilitated, and that it would be possible to appreciate the series of chemical changes which take place in this organ before and after division of the eighth pair of nerves.

M. Bernard made a fistulous opening in the stomach of a dog, so as to observe what passed in this viscus during digestion. The animal was submitted alternately to two kinds of nourishment; first, to raw flesh; secondly, to a kind of soup composed of bread, milk, and sugar cane.

At the moment these aliments were injected, the mucous membrane of the stomach became red, turgid and erectile, exhaling from its surface an acid and transparent fluid, the gastric juice which moistened the food. The raw flesh at the end of two or three hours was reduced to a chymous paste, with a very acid reaction. When the soup was given, the milk at once became coagulated; in about half or three-quarters of an hour afterwards, the whole formed a whitish homogeneous and very acid pulp. No sign of fermentation was ever observed in these mixed matters. The sugar found in the latter, whether examined at the beginning or at the end of digestion, was always in the state in which it exists in the cane.

After eight days of observation, M. Bernard resolved to divide the pneumogastric nerves. The dog having fasted for twenty-four hours, the experimentalist withdrew the apparatus, which habitually closed the fistula, and cleansed the interior of the stomach with a soft sponge. The viscus manifested a marked sensibility, and contracted upon the foreign body, the mucous membrane pouring out an abundance of gastric juice. Division was then made of the pneumogastric nerves in the middle of the neck. Immediately the mucous membrane, which was turgid, shriveled up and became pale, as though it was bloodless. Its sensibility and motion ceased, the production of the gastric juice was instantly arrested, and an abundant secretion of a ropy mucus, with a neutral reaction, soon succeeded in its place. Some morsels of flesh, and some soup, with sugared milk, were then introduced into the stomach. In an hour's time the bread was found softened, and saturated with the mucus; the milk was not coagulated; the meat had not undergone any alteration; and the whole alimentary mass presented a neutral reaction. At the end of two hours things remained precisely in the same state.

After eight hours M. Bernard found in the stomach a sort of whitish pulp, with an extremely acid reaction. But there was no difficulty in proving that this acidity arose from a lactic transformation, which was effected in the midst of these matters by the sugared soup. The meat had not experienced the least change, and all was found in the same state after a lapse of twenty-four hours.

We may observe from this first experiment, said M. Bernard, 1st, that the division of the pneumogastric nerves not only extinguished sensation and motion of the stomach, but that it also instantaneously arrested the secretion of the gastric juice.

2d. That after this division, digestion did not take place, since, twenty-four hours afterwards, the pieces of meat introduced into the stomach were found entire and unaltered.

3d. It was especially remarked, that in the absence of the gastric juice, spontaneous decomposition took place in the midst of the matters contained in the stomach, which was demonstrated by the lactic transformation, developed by the agency of the soup and sugared milk.

In other dogs in which he had divided the pneumogastric nerves, M. Bernard perceived, after three or four hours of ingestion, conversion of the cane-sugar into grape-sugar; and at the end of ten or twelve, lactic transformation was complete. When the alimentary substances, as the meat for instance, were not susceptible of giving rise to acid decomposition, the neutral reaction of the stomach continued throughout. Thus two series of chemical phenomena of a very different nature may take place in the stomach, according as this organ receives, or is deprived of its normal nervous influence. In the former case gastric juice is produced, which effects chymous dissolution of the aliments. In consequence of this action, the substances contained in the stomach are submitted to special decompositions, and they lose the property of fermenting or reacting upon each other. Thus the gastric fluid prevents putrefaction. If, on the contrary, the stomach is deprived of the influence of the eighth pair of nerves, digestion is arrested, and the articles of food, not modified by the gastric juice, react upon each other.

M. Bernard related a more recent experiment which rendered the preceding facts still more evident, whilst it proved that absorption may take place in the stomach, even after the division of the pneumogastric nerves. It is known that emulsine and amygdaline are two innocent substances when they are administered by themselves, but that they develop hydrocyanic acid and become a violent poison when placed in contact.

Having taken two dogs that had fasted, Mr. B. divided in one of them the pneumogastric nerves. In the stomach of each animal he injected a dose of emulsine, and about half an hour afterwards an equal quantity of amygdaline. The dog in whom the nerves had been cut died at the end of a quarter of an hour, with symptoms of poisoning by hydrocyanic acid, the other survived without experiencing any symptoms. In the latter case, the emulsine, modified by the gastric juice, had lost the property of reacting on the amygdaline.

The author concluded from this last series of experiments, that in digestion the alimentary substances are exclusively submitted to the powerful influence of the gastric fluid. Their natural affinities then appear in some manner destroyed, and no spontaneous decomposition is effected between their elements.

That after division of the pneumogastric nerves these reactions take place, owing to the absence of gastric juice from the stomach.—*Prov. Med. and Surg. Journ.*, July 31, 1844.

4. *Transmission of Hydatids by Contagion.*—Some highly interesting and curious researches on this subject have recently been published by Prof. KLENCKE, of Brunswick. After commenting upon the vague manner in which the term hydatid has been applied, the author proposes the following definition:—"Every vesicular production found in living organized tissues, which is provided with spontaneously moving organs, or which has at least the power of reproduction, apart from the tissue in which it is lodged by giving birth to individuals similar to itself." The different species are then characterized, the situations in which they are commonly met with pointed out, and many other particulars connected with the natural history of these productions, noticed.\* The most important part of the memoir, however, is that occupied with an account of the experiments performed by Professor Klencke upon propagating hydatids by means of inoculation. With the object of examining the reproductive powers of the false hydatid, (*Hydatid spuria*), he injected warm water containing some of these hydatids, collected from the brain of a fresh human subject, into the abdominal cavity of two puppies and two kittens. After the injection, the opening was carefully closed, the animals were restored to their parents and grew perfectly

\* [See No. XIII. of this Journal for Jan. 1844, p. 196.]

well. At the end of three months he found upon examining the abdomen, in setting out from the punctured wound, an adherence of the parietal layer of the peritoneum, with the epiploon at the seat of puncture, and upon this adhesion, as well as upon the internal surface of the peritoneum, in the neighbourhood of the cicatrix, there existed in both the puppies, and in one of the kittens, a very great number of false hydatids. In the other kitten, in which no adhesions had taken place, there was no trace of these productions in the neighbourhood of the cicatrix, whilst upon the peritoneal surface of the bladder, a mass of false hydatids was found projecting into the abdomen.

Some very small hydatidic cellules were taken from the plexus choroides of a man, and with them the orbit of a hen was inoculated. The inflammation which supervened subsided by the eighth day. At the end of thirteen weeks the whole external wall of the orbit was tumefied, and the eye pushed inwards. Upon examination after death, the orbit was found filled with a cellular mass containing a very great number of false hydatids. The whole blood of these hydatids was injected into the femoral vein of a kitten. At the end of three weeks the animal became sullen and habitually sleepy. Upon examination there was found in the heart, and especially in the right auriculo-ventricular orifice, a fibrinous and gelatinous precipitate, containing an innumerable quantity of false hydatids.

The false hydatids are more rare in the lower animals than in man, and their transmission is more easily effected when the species of animal inoculated is not far removed from that which furnished the parasite. In regard to the acephalocysts and echinococi, the author says that he has found the former in the milk of the cow, and floating along with them, in the serum of that fluid, the small ovules that are met with in the bodies of these animals. Both forms of hydatid are met with daily in the flesh and blood of animals, and if the process of cooking does not destroy them, we must run continual risk of contagion.

With a view of ascertaining what effect digestion would produce upon them, he instituted the following experiment:—Some full-grown echinococi were placed in the gastric juice of a dog, and in that of a man; at the end of three hours they appeared dead, their head being retracted, and they exhibited no signs of movement. After having washed them well in warm water, they were introduced into the subcutaneous cellular tissue of the thigh of a kitten; eight days afterwards the wound had cicatrized. He next took some echinococi, which had been immersed in gastric juice, diluted with half the quantity of milk or water, and inoculated a young dog by an incision in the abdomen, reaching to the peritoneum, but without opening the latter, upon which he placed two of the parasites; the wound was accurately closed by suture, and at the end of three weeks he found a cellular and highly vascular cavity, containing a yellowish serosity, in which were two echinococi, remarkably modified in form. They were transformed into vesicles, covered upon their external surface with a number of gemmules and isolated cells, supported by pedicles. Examined under the microscope, these cells, upon being crushed, gave exit to a multitude of other small cells, similar to those found in the body of the acephalocysts, and which represented the ovules. The hydatids being open, exhibited upon their internal surface a still greater number of gemmules, pediculated cells, and other cells, floating freely in the liquid.

From an extensive series of experiments, Professor Klencke deduces the following conclusions:—1st. That in all hydatids we observe a cyssiparous and oviparous reproduction.—2d. That there are false hydatids, which propagate by blastoderm (blastidie).—3d. That all hydatids are transmitted from one organism to another, and being found in our fluid aliments, and in the flesh of animals, can be transmitted by infection.—4th. That the acephalocysts are not distinct from the echinococi, but merely the ova of the latter, with or without the parent cyst.—5th. That whatever be the way by which they have entered the animal system, hydatids can be conveyed by the current of the circulation.—6th. That certain agents in the organism and medical substances have the power of destroying them.—*Annals of Nat. History, from Gaz. Méd. de Paris, Dec. 30, 1843.*

5. *Reunion of a divided Nerve*.—Dr. OKE relates, in the *Provincial Medical and Surgical Journal*, July 24th, 1844, the following interesting fact in a physiological point of view.

"In cutting through the muscles in an operation for necrosis of the humerus, the musculo-cutaneous nerve was unavoidably divided, which occasioned the instantaneous dropping of the hand. This appeared at first to be an unfortunate result, as it was feared it might occasion the permanent loss of the hand and deprive the patient of the power of writing, for he could use his pen tolerably well.

"To make up for so serious a deprivation in some degree, as soon as the state of the right arm would admit of it, he was sent to a schoolmaster to be taught to write with his left hand, which, in about four months, he accomplished; but at the end of this time I was gratified to observe a returning power in the right hand. The power gradually increased; and in the course of a few weeks he completely regained its use, and thus was enabled to write with both hands.

This was an important fact in physiology, inasmuch as it showed that the trunk of a nerve, though it be divided and its ends kept apart for a considerable time, might eventually unite and regain its normal functions."

6. *Open Foramen Ovale—no cyanosis*.—Dr. WOODHOUSE exhibited to the Reading Pathological Society a heart taken from a woman aged 71, who died of apoplexy. The foramen ovale was patulous to a considerable extent—about half an inch; the valvular portion of the septum auriculorum unusually large. There were no symptoms during life, as lividity of countenance, deficient nutrition, &c., to indicate such a condition.—*Prov. Med. and Surg. Journ.*, July 24, 1844.

7. *Metallic Mercury in the blood and organs*.—Dr. OESTERLIN has discovered, by means of the microscope, minute globules of metallic mercury in the tissues in the blood, and in the secretions of men and animals to whom mercurial ointment has been given internally and applied by frictions to the skin.—*Gaz. Méd. de Paris*, Jan. 5, 1844, from *Roser und Wunderlich, Archiv. fur Physiologische Heilkunde*, 1843.

8. *Microscopic Anatomy of Tubercles*.—The following are some of the most important conclusions of an elaborate memoir, that was recently communicated to the Academy of Sciences.

1. The constant microscopic elements of tubercles are these: *a*, molecular granules; *b*, a hyaline interglobular substance; and *c*, the proper corpuscles, or globules of tuberculous matter. These globules contain a number of molecular granules, but no distinct nuclei. They are not affected by water, ether and the feeble acids; but they are dissolved by the strong acids, as well as by ammonia and caustic potash.

2. The opinion of certain pathologists, that tuberculous deposit and its globules are only modifications of purulent matter, is contradicted by the result of microscopic inspection; the differences between them are strong and decided. The corpuscles of the latter are considerably larger, of a regularly spherical shape, and contain from one to three nuclei: they are, moreover, usually free and isolated: whereas, those of tuberculous matter are, especially in the crude state of tubercles, closely joined together. The globules of cancerous matter are twice or even four times as large, and they contain a nuclei, in which again from one to three nucleoli are often observable.

3. In sarcocele and also in scirrhus and encephaloid tumours of the mammae, we not unfrequently find a yellowish, cheesy-looking substance, which much resembles genuine tuberculous matter; but a careful examination with the microscope clearly shows that it consists entirely of globules of cancer infiltrated with fat.

4. When tubercles soften, their interglobular substance liquifies, the globules separate from each other, and may then, by absorbing a certain portion of the fluid, become larger; this change does not constitute an increased growth, but, on the contrary, the commencement of the process of decomposition.

5. The pus, which is found blended with the softened tuberculous matter, is supplied by the surrounding tissues and is by no means the result of any transformation of the matter itself; but the pus, it must be confessed, quickly alters it, and renders its elements much less easily recognizable.

6. The globules of softened tubercles become ultimately dissolved in a granular fluid, and thus the *ramollissement* of their substance passes fairly to the state of diffidence.

7. The cretaceous condition of tuberculous matter presents, under the microscope, the appearance of amorphous mineral granules, blended often with crystals of cholesterine and colouring matter. A part of the tuberculous globules is then removed by absorption, while the other portion remains for a long time in an unchanged condition.

8. Occasionally we find, in tuberculous deposit, corpuscles of fat, melanosis, greenish-coloured globules and crystals which have the form of those of the ammoniaco-magnesian phosphate. Besides these admixtures, we may find, blended along with them, the elements of inflammatory and suppurative action, and various sorts of epithelial exudation; all of which tend to modify the essential microscopic features of the tubercles.

9. The seat of tubercles in the lungs is usually the inter-vesicular elastic cellular (or areolar) tissue: sometimes, however, they are secreted into the air-vesicles themselves and into the capillary bronchial tubes.

10. The semi-transparent gray granulations of the lungs are composed of tuberculous granules, interglobular substance, which is more abundant and more transparent than in the yellow tubercles, and of pulmonary fibres more or less altered in their appearance. They are not invariably the "point de depart" or primary condition of the miliary yellow tubercles; as these latter are sometimes developed as *such*, from the very commencement of their deposition.

11. Microscopic examination most decidedly exposes the fallacy of the opinion that the gray granulation is the product or effect of inflammatory action.

12. A vomica or tuberculous excavation is in every respect analogous to a tuberculous ulcer of the skin or intestinal canal; it is not necessarily preceded by, or the result of, the suppurative process. As a general remark, it may be asserted that phthisis is accompanied with an ulcerative diathesis.

13. The fluid of pulmonary excavations contains the following elements: *a*, tuberculous matter, with globules which are either much more turgid than usual, or are altogether diffuent; *b*, globules of pus sometimes in small quantity; *c*, puoid globules; *d*, granular globules; *e*, globules of mucus or of muco-pus; *f*, blood globules; *g*, pulmonary fibres; *h*, black pigment; *i*, epithelium shreds; *j*, crystals; and *k*, globules of fat. (Surely there is a good deal of hair-splitting nicety in such an enumeration as this.)

14. The cavity of a vomica is lined with a pyogenic membrane, the formation of which may be regarded as a curative effort of nature to isolate the cavity from the surrounding tissue, and thus to favour its cicatrization. The cicatrization is in many cases promoted by a new secretion of fibrous matter, and occasionally also of a chalky deposit at the same time.

15. The thickening of the pleura over the seat of tuberculous deposit is the result not of inflammation alone, but also of an augmented nutrition or hypertrophy, in consequence of the increased flow to it of the blood, which formerly permeated the (now obliterated) capillary vessels of the surface of the lungs. It thus becomes a supplementary organ of circulation in phthisis and serves to increase the anastomoses with the aortic circulation by its intimate adhesions with the parietes of the chest.

16. The liver is often the seat of extensive tuberculous deposit; and this lesion may readily be mistaken for cancerous transformation. The distinctive microscopic characters are most to be trusted to in the pathological diagnosis of such cases.

17. The fatty degeneration of the liver and heart—so accurately described by M. Bigot—exhibits a tendency to the internal deposit of fatty matter in phthisis,

while all the fat of the external parts of the body is at the same time entirely absorbed.

18. We occasionally find a quantity of tuberculous deposit in old membranous deposits on the pericardium. In a case where the pericardium adhered firmly to the surface of the heart and all the surrounding parts, numerous anastomoses between the ramifications of the coronary vessels and those of the surface of the lungs were found to have been established.—*Med. Chirurg. Rev.*, July, 1844, from *Gazette Médicale de Paris*.

## MATERIA MEDICA.

9. *Colchicum a substitute for Ergot to induce uterine contractions.*—Dr. NETTA relates, in *Il Filiale Selezio*, a case of abortion, in which the placenta was retained, and the uterine contractions had ceased. Two doses of powdered root of colchicum, at an interval of half an hour, were prescribed by Dr. N.; and soon after the second dose uterine contractions came on. Whether these were the effect of the remedy or not must be determined by further experience. It has, however, been asserted by others that colchicum possesses oxytocic properties.

10. *Therapeutic employment of the Chloruret of Tin.*—M. NAUCHE has recommended the chloruret of tin in cancerous affections, and the following are the formulæ in which he prescribes it:—

*Solution of the Chloruret of Tin.*—Twenty-five milligrammes of the chloruret of tin, five hundred grammes of distilled water. This solution is given to the patient in the dose of an ordinary teaspoonful daily; each dose is taken in a cupful of gum-water. M. Nauche also prescribes the solution in lotion as a dressing for cancerous ulcers.

*Ointment of the Chloruret of Tin.*—One to two grains of the chloruret of tin, thirty grammes of lard, mixed together, and made into a very homogeneous ointment, which is to be divided into eight equal portions, one of which is to be employed daily in friction, on the inner parts of the legs or thighs. M. Nauche avers that he has derived great benefit from the use of these two preparations in cases of glandular enlargements, in scirrhus affections, and even in the treatment of ulcerated cancers.—*Med. Times*, from *Boucharlat's Annuaire de Thérapeutique* for 1844.

11. *On the Therapeutic Action and Uses of Ergot of Rye.*—By M. SACHERO, Professor of Clinical Medicine in the University of Turin.

I. GENERAL REMARKS.—The author commences his paper by showing that, from time immemorial, the ergot of rye has been used as a means for accelerating the progress of labour; but powerful as it is as an agent for attaining this end, he believes that it is only capable of doing so when the process has already commenced, and that to ensure success, even then, it should not be administered at too early a period. The fact that the ergot acts only in this manner, he considers a very important one; for, were it otherwise, it might be often used criminally for the purpose of causing abortion. In proof of this view, that the ergot acts more as an assistant than as a provocative to labour, he cites the following case: The mother of a family had become pregnant in a clandestine way and was desirous of procuring abortion; with this intent she took, for a considerable period, pills composed of the ergot, containing two grains in each, but without effect; having reached the eighth month, she commenced taking five of the pills at a time, twice a-day; in the course of twenty days, she took two drachms of the ergot, but with no other effect than that of causing slight pains in the loins, and some disorder of the stomach. At the end of the ninth month she was safely and easily delivered. It would appear that the child, however, had suffered from its use, for its skin was very red, and covered, here

and there, with a concrete and adhesive albuminous substance; it was sickly and feeble, and lived only twenty days.

This fact, then, he considers as proving that the ergot of rye, even in large doses, does not excite abortion, provided the mother and child are in good health. And this conclusion is not overturned by what occurs in the convulsive gangrenous affection arising in pregnant women from the use of bread containing the ergot, because, in this case, there is a true poisoning, by means of which the conception is destroyed, and then the uterus, sooner or later, contracts and expels the foreign body, as always happens, whatever may have been the cause of the death of the fœtus.

The abuse of the ergot of rye in pregnant women may thus cause the death of the fœtus, and at last either produce abortion or parturition; but the inducement of labour, thus ascribed to the medicine, is only produced by its having first destroyed the child, whose body afterwards causes uterine contractions, and, by the continuance of the medicine, these latter may be sustained.

Those who have been in the habit of administering the ergot in tedious and difficult labours have not failed to observe that it had also a power of arresting hemorrhage, more especially in cases of abortion. Hence the name hemostatic. It has been given for this purpose by Atlee, Shalcross, Dewees, Marshall Hall and Speirani of Pavia; the latter, in his clinical researches, prescribed it, not only in uterine congestions and menorrhagia, but also in epistaxis, pulmonary hemorrhage and hæmaturia. The experience of Speirani as to its usefulness in pulmonary hemorrhage is confirmed by Sachero, who cites two cases of abundant hemoptysis cured by it. It has also been used by Bazzoni, who, in 1831, published a work on the subject, in which he announced the following conclusions: 1st, That the ergot of rye is a certain remedy in uterine hemorrhage and leucorrhœa. 2d. That the disagreeable sensations caused by it in the head are merely temporary. 3d. That, if administered with prudence, it is without danger. 4th. That it is equally efficacious, whether the discharge be active or passive. 5th. That its use is beneficial, even in those cases where the uterus and its appendages are affected with organic disease. 6th. That menstruation is not disturbed by its use. In the same year Pignacca also published some cases of hemoptysis and menorrhagia cured by the same means; and similar facts have been published by Cubini, F. Müller and others.

The investigations of M. Sachero, however, as to the employment of this substance as a therapeutic agent extended still farther. "Reflecting," he says, "on its beneficial effects in urethritis in man, effects due to its hyposthenic action on the vessels of the mucous membrane, I conceived that the same action might extend to the mucous membrane of the whole genital apparatus, and in consequence, I tried the use of the ergot in involuntary seminal emissions, and particularly in cases the most obstinate; the result exceeded my expectations; the cure was invariable; and I believe I have solved the problem which perplexed Lallemand and others. I published my observations on this subject in the *Giornale delle Scienze Mediche* in 1839. In the four cases which occupied my first note, I had remarked that there was irritation of the gastro-intestinal mucous membrane, and this led me to believe that seminal emissions had their origin in a hypersthenic state of the mucous membrane of the genital organs."

Some details regarding the good effects of the ergot in intermittent fevers and paraplegia are here given.

The latter facts confirm the author in the opinion that the elective action of the ergot is specially directed to the inferior portion of the spinal cord. He cites some cases of obstinate bronchitis, from his clinical reports, which yielded as by enchantment to the use of this remedy; and, lastly, a case of severe otorrhœa which occurred in a young lady of a lymphatic temperament, who, after angina, was attacked with suppurating otitis, accompanied with head symptoms and a fever. Repeated blood-letting and the other usual remedies were tried, but without the least avail. Injections into the ear were then tried, consisting of an infusion of the ergot, made with 4 grammes of the latter to 120 grammes of boiling water; the medicine was, at the same time, given internally; there

was immediate melioration, and a complete cure followed in the course of a month.

II. PHARMACEUTICAL REMARKS.—The following details as to the mode of treating the ergot M. Sacheri owes to personal communication with M. Bonjean, the celebrated pharmacist of Chambéry, whose analysis of ergot is the most careful and recent which we possess. The active principles of this powerful remedy may be reduced to two; the watery extract soluble in cold water, and the resinous extract soluble in alcohol. Desirous of studying the effects of these extracts separately, he caused M. Abbene, apothecary to the Hospital Saint Jean, to prepare a certain quantity of each. The following was the method pursued: Three medicinal pounds weight of the powdered ergot, of good quality, gathered towards the end of harvest when in a state of maturity, were treated with boiling water by displacement, and a liquid obtained which, on cooling, deposited a sediment composed of the resinous extract, and a portion of gum; the fixed oil rose to the surface and was easily separated by decantation. The diaphanous liquid evaporated by means of a water bath, yielded 245 grammes (8 oz.) of watery extract, to which Bonjean has given the name of hemostatic extract, (*extrait hémostatique*) and which is composed of ergotine and a little gum. The sediment mentioned above, as well as that remaining in the filter, was afterwards treated with alcohol at 25°; and this solution, filtered and evaporated, yielded 20 grammes of resinous extract. Thus the ergot, in these operations, yielded nearly a quarter and a half of its weight of watery extract; and hardly a 57th of resinous extract. He does not consider it necessary to give any details respecting the oil, whose proportion may be about 35 per cent., and for the reason that it has no special action on the uterus; its use, moreover, is not unattended with danger. In a letter lately sent by M. Bonjean to the Academy of Sciences, through M. Dumas, he stated that he had discovered a method of freeing the hemostatic or watery extract from the albumen which it contains, by submitting to ebullition, by means of a water bath, the solution made with cold water by the method of displacement; the ebullition causes the albumen to coagulate, and it can afterwards be readily separated. The purest extract is that obtained by evaporation; the author names it *ergotine*, but this is incorrect, as it is not a simple body. When boiling water is used for the first method by displacement, there is this double advantage, 1st. That of coagulating the albumen immediately, which can be afterwards separated from the liquid; 2d. It is not necessary to leave the liquid for any length of time in a state of rest, as done by Bonjean, to obtain the resinous extract, as that is effected by the simple act of cooling. Decompositions so frequent, especially in summer, are thus avoided.

III. DYNAMICAL ACTION.—Having thus obtained a sufficient quantity of the two extracts, he instituted a series of experiments to determine the dynamical action of each; that their action would not be identical, he conceives, might be conjectured from their appearance; the watery extract is of a reddish-brown colour, with a smell of ozmazome, and has a slightly pungent and bitter taste, similar to that of spirit grain, but not astringent; whilst the resinous, on the other hand, is of a deep brown colour, with no particular smell, and is very pungent and slightly bitter to the taste.

A. *Watery extract.* The astringent (hemostatic) power of the ergot, whether given in powder, infusion or decoction, has been long known. It is probable that if the infusion be used, more especially after allowing it to cool, we obtain only the watery extract or ergotine of Bonjean; consequently, this form should be preferred if we wish to control hemorrhage, or any other discharge arising from acute or chronic inflammation, such as leucorrhœa, or purulent discharge from the ear. The facts already cited prove this. But it is to Bonjean we are indebted for having proved by experiment, that the hemostatic power belongs exclusively to the watery extract. Some cases follow here of uterine hemorrhage arrested by means of this substance. It was also given to two women in labour, which was advancing slowly, with sluggish contraction of the uterus. 30 grains of the extract, (a gramme and a half,) were prescribed in 120 grammes of water; no effect followed; and uterine contractions only appeared some hours later,

consequently they could not in strictness be attributed to the remedy. "It appears, therefore, that the watery extract, instead of hastening labour, retards it, and that the power of producing uterine contractions does not belong to this ingredient of the ergot."

**B. Resinous extract.** In consequence of the latter supposition, he should next have proceeded to inquire if the resinous extract possesses the power of inducing uterine contraction. But facts, he says, are yet wanting to decide the question. As far as is known, however, it would appear, from the experiments instituted by Bonjean on rabbits and dogs, that it has no sensible effect upon them. Our author tried the effect of it on his own person, and also on that of a friend considerably younger than himself. "I took," he says, "at eight in the morning, and with an empty stomach, 16 centigrammes (5 grs.) of the resinous extract, prepared by M. Abbene, and made up into a couple of boluses, with the extract of violets; the one was taken at the time mentioned, and the other in the course of an hour. I had hardly swallowed the first dose when I experienced a sensation of heat in the throat, nausea and oppression at stomach; these sensations were felt for a quarter of an hour, and they returned, but with less severity, after the second dose. At a later period, I felt some heat and itching at the base of the glans penis; and during the course of the day a few drops of mucus escaped from the urethra." His friend took the medicine in another form. He dissolved 25 centigrammes in alcohol, diluting it afterwards with water, and he took the whole in two doses; he experienced some pain and heat of stomach, then pain in the bowels, after which the latter were moved; his habit was usually constipated. Ten days after, Sachero again repeated the experiment on himself; taking 10 grs. in two doses, he experienced merely a sensation of heat in the bowels, and some smarting in the urethra. Six days after he took 15 grs. with nearly the same effects. No other conclusion, he thinks, can be drawn from these experiments than that the resinous extract is perfectly harmless. Bonjean had already arrived at the same conclusion in regard to the watery extract; and this circumstance would lead us to believe, with this eminent chemist, that the poisonous principle of the ergot is the oil already mentioned. In conclusion, M. Sachero agrees with those accoucheurs who believe that the most suitable form in which the ergot can be given is the simple powder, and that without submitting it to any further preparation.

**C. The fixed oil.** It has been already stated, that, according to the analysis of Bonjean, the quantity of this oil in the ergot may amount to about 35 per cent., and that it is this element which constitutes its poisonous principle. It produces on animals all the symptoms of poisoning by the ergot in substance; and the same appearances are found in the body after death.

**IV. CONCLUSIONS.**—From what precedes, then, it follows, 1st. That the watery extract (hemostatic extract or ergotine of Bonjean,) is a hyposthenic remedy acting on the general vascular system; and that by means of it we can control hemorrhage, morbid sero-mucous discharges, and lessen over-action of the heart. Its action is clearly demonstrated to be on the vessels of the uterus, because, by its aid, we can control menorrhagia, threatened abortion, slight metritis and excitement of the uterine capillaries. The circulatory system being dependent on the great intercostal nerve, it follows that the action of the watery extract extends to this nerve and its numerous ramifications, as especially to those which preside over the life and functions of the uterine vessels. 2d. The resinous extract probably acts as a stimulant and its action extends to the nerves both of sensation and motion of the uterus. It is highly probable that when the ergot is administered in powder, it is in this extract that the principle resides which rouses into activity the inert uterine contractions which had previously commenced. 3d. The action of the ergot, when administered in its natural state, appears to be of two kinds; the one, as in labour, affects the sanguineous system, the energy of which it diminishes (hyposthenises) by means of the ergotine; the other, is upon the nerves of the uterus, which it stimulates by its resinous principle. To this double action must be added a third, equally hyposthenic, that of the oily or poisonous principle. Thus, then, in practice, several indications may be ful-

filled by the isolated administration of these principles, and by the ergot in its natural state. The study of these cannot fail to extend its power, as a therapeutic agent, when we have first determined the special circumstances in which they should be applied. 4th. The ergot only acts beneficially in labour, if this process has already commenced, when the amnion is ruptured, the position of the child natural and the uterine contractions have been arrested or enfeebled, either by oppression of the forces, or by actual debility. In this latter case, the resinous extract is to be preferred to the watery or ergotine, consequently, the ergot has no effect in inducing abortion or labour, unless there is previously a commencement of uterine action. There is, nevertheless, an exception to this rule; and that is when the fœtus is dead, or the uterus contains a tumour; but when this occurs the uterus is in an unhealthy state, and, most generally, the ergot only acts by exciting the organ to contract, or facilitates and hastens the operation if already begun. If the ergot is given in large and repeated doses, previous to the commencement of labour, it either destroys the child, producing immediate labour, or at all events it sickens it. 5th. Its use is strongly indicated in hemorrhage, arising from partial detachment of the placenta. In this case, life, as is well known, is in danger, if the flooding is great and labour not speedily accomplished. The ergot, in its natural state, or one or other of the extracts, may be prescribed, according to the state of the patient. There are cases where the woman suffers from a true and general plethora of the uterus, recognizable by the state of the pulse, which is full and slow, dyspnoea, the swollen state of the veins of the hands, legs and feet, which become blue, and by a severe throbbing headache. In these cases the patient should be bled once or twice, and then, if the uterus still continue inert, the ergot in its natural state may be prescribed, if it is thought proper and necessary to excite labour; if this is not considered desirable, then the ergotine should be had recourse to, if we wish to prevent hemorrhage and abortion. A bleeding should always precede the remedy in cases of congestion of the uterus. 6th. If the uterus does not expel the placenta spontaneously, within a few hours after the birth of the child, the use of the ergot re-excites the contractions in the course of seven or eight minutes, or in a quarter of an hour at most. 7th. In the preparation of the remedy it is an essential circumstance that the ergot be not gathered till it has reached a state of perfect maturity, towards the end of harvest, and in places with a free eastern exposure. If it be not perfectly ripe, it has either no action, or it is very feeble, as shown by the experiments of Bonjean. In this case it merely contains a little watery extract or ergotine, but no fixed oil, and, consequently, is not poisonous. It is probable that it has been owing to the different degrees of maturity of the ergot, that the different effects, observed by certain authors, are to be attributed. It is also known that the ergot loses its virtue if it has been gathered more than a year, or if it is worm-eaten, has been exposed to the air, been roasted at too high a temperature, &c. It should only be reduced to powder when about to be used. 8th. It is more advantageous to give the ergot in small and repeated doses than in large ones which are often rejected by the stomach. An agreeable way of giving it is to suspend it in mucilage and add some aromatic syrup. We have already spoken of the manner of preparing an infusion by boiling water; the oil may be separated by decantation, and there remains the pure ergotine. The infusion may also be made with cold water. The decoction allowed to cool is little more than an infusion made in the warm way.

This interesting article concludes with several cases of uterine hemorrhage cured by means of the watery extract; and with a case of abundant sero-mucous discharge from the genital organs, in a girl three years of age, which had resisted all the ordinary means of treatment, but was cured by a single dose (60 centigrammes) of the powder infused in warm water, and then allowed to cool.—*Lond. and Ed. Month. Journ. Med. Sci., Aug. 1844, from Giornale delle Scienze Mediche della Società Medico-Chirurgica di Torino, in the Annales de Thérapeutique.*

12. *Ipecacuan* as a Counter-irritant.—Dr. CORMACK detailed to the Medico-Chirurgical Society of Edinburgh the result of his hospital experience of ipeca-

cuan as a counter-irritant in the form of ointment, as recommended by Dr. Hannay, of Glasgow.\* Dr. C. had tried the ipecacuan in a great many cases, and in the proportion of 10 to 12 of them, it had failed to produce any eruption, even when the powder was in the proportion of half an ounce to an ounce of lard. In a few persons only, with a delicate skin, or who had had recent blisters on the surface experimented on, did he succeed in bringing out an eruption. The eruption was vesicular in three cases which were carefully observed. In the same persons on whose skin the ointment produced no effect, a good crop of pustules was in every instance brought out by one, two or three frictions with a liniment of equal parts of olive and croton oil. Dr. C. believed that there were many vegetable powders which would be found more active counter-irritants than ipecacuan.

Dr. Handyside and Dr. Douglas MacLagan stated that they had met with no good results from its employment. Their experience corroborated that of Dr. C.—*Lond. and Ed. Month. Journ. Med. Sci.*, Aug. 1844.

13. *Arsenical Paste of Frère Côme*.—Arsenious acid is one of the best known caustics; it would certainly be preferred for cauterizing cancers, if its absorption were not to be dreaded. By employing it with care, nevertheless, and limiting its action, it may yet be usefully applied. Several receipts for arsenical caustic pastes are published in the *Formulaire* of M. Bouchardat; that of Frère Côme has lately attracted the attention of several surgeons. Frère Côme died without making known its composition: and M. Souberbielle, his relative and pupil, alone continued to make use of it with as much success as his inaster. M. Souberbielle communicated the formula to M. Manec, who applied the paste with very advantageous results. It is prepared in the following manner:—six grains of white arsenic, one gramme and ten grains of cinnabar, fourteen grains and a half of calcined sponge, powdered together. The proportion of arsenic is as from eleven to twelve to the hundred, and consequently stronger than in any known preparation, excepting that of Rousselot. When it is about to be used, the powder is mixed with a little water to the consistence of pap, and is then lightly spread over the ulcerated surfaces with a brush, care being taken to use only a small quantity, it being better to have recourse to repeated applications than to run the risk of considerable absorption. It is then covered with a piece of moistened agaric, which becomes detached at the end of ten, fifteen, twenty, or thirty days, sometimes later, and separates with the slough. After this separation has been effected, M. Souberbielle dresses the wound with the *yellow pomade of Frère Côme*, prepared as follows:—thirty-two grammes of yellow wax, forty-eight grammes of rose oil, seventy-five grammes of camphor, and one hundred and fifty grammes of Goulard's extract. This ointment is applied, spread upon linen, until the wound is cleansed of the whitish layer which covers it. If fungous excrescences should reappear afterwards, a renewed application of the paste is made, and repeated until the cancer is entirely destroyed. A very important remark is connected with the extent of the ulcer; if it exceeds three square centimetres, the treatment must be divided, in order not to risk absorption by too large a surface, and with that view not to cauterize a new portion until after the separation of the first slough. When the edges are callous, they must be stimulated by a blister, the caustic not acting except upon a moist and raw surface. M. Manec says he has ascertained by numerous experiments, that it is not necessary to remove the cancerous parts with a knife, before applying the arsenical paste, and that the diseased parts, whatever the thickness and depth of their roots may be, are specially and exclusively destroyed by the caustic, whilst the healthy parts are scarcely injured. M. Manec has also ascertained by experiments with Marsh's apparatus, that arsenic was absorbed in certain proportions, and that the urine yielded traces during a period varying from four to five days, according to whether absorption had been more or less rapid. The fæces have afforded traces of arsenic even or eight days after the urine had ceased to yield any.—*Med. Times*, Sept. 1844, from *Bouchardat's Annuaire* for 1844.

\* See No. of this Journal for Jan. 1844, p. 188.

14. *Prestal's Adhesive Plaster*.—The following composition is said never to crack, and not to inflame the skin:—Empl. diachyl. gum, four hundred grains, purified rosin, fifty grains; tereb. venet., thirty-eight grains, are mixed together at a gentle heat, and then twelve grains of gum mastich and twelve grains of gum ammoniac incorporated, and the mass spread on linen. In winter, it is advisable to add ten grains more turpentine and twelve grains of ol. amygdal.—*Ibid.*, from *Journ.für Prakt. Chem.*

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## MEDICAL PATHOLOGY, AND THERAPEUTICS, AND PRACTICAL MEDICINE.

15. *Marsh Remittent Fever of the islands on the east coast of Africa*.—Dr. JAMES B. ALLEN gives, in the *Edinburgh Monthly Journal of Medical Science*, (Aug. 1841,) the following very interesting account of the form of remittent fever which prevails in Madagascar and the adjacent islands of the east coast of Africa. We transfer it to our pages, as it is, we conceive, a valuable contribution to our knowledge of febrile diseases.

The earliest diagnostic sign of this fever was invariably, he states, "a feeling of nausea, experienced on going out in the morning, continuing for three or four hours, but never exciting vomiting, and gradually subsiding into perfect ease and quiet, attended even by appetite for solid food. There was, at that period, no foulness of tongue, and the pulse only differed from the natural state, in being somewhat slow and hard. The delusive interval of health lasted usually from two to four hours, and was then disturbed by a slight return of nausea, with languor, inquietude, yawning, chilliness and thirst. Shortly the nausea again went off; but the other symptoms became confounded with heaviness of inspiration, a sense of tightness over the chest, headache, and intolerance of light, pain along the spine, especially in the lumbar region, and an uneasiness, amounting to pain, throughout the whole frame, which the most enduring tried in vain to soothe by constant change of posture. Now the pulse is about 90, hard and irregular, but not full; there is throbbing of the temporal and carotid arteries; the face is alternately pallid and flushed; the tongue, florid at first, is gradually taking on a dirty white coating; the bowels are rather constipated, and the urine is scanty and high-coloured. Towards night the chilliness is displaced by a burning feeling without and within; the temperature of the skin is 100° of Fahrenheit; the thirst is more insatiable; and every symptom is aggravated as night advances. Next morning occasional fits of vomiting come on; and about twenty-four hours after the first accession, sheer exhaustion apparently induces a remission, attended by a disturbed and easily broken sleep of four or six hours, with slight diaphoresis. As the second evening drew on, so did all the symptoms return with greater violence. The pulse varied from 100 to 120, though it was in other respects as on the first day; there was burning in the eyes; considerable deafness; increase of the heat of the skin to 103°; vomiting of coffee-ground-looking matter, of sour smell and bitter taste, continued at intervals, with pain in the precordia; and, in short, the second night was passed as the first, but with far greater suffering from heat, thirst and pain shooting through the head. With the third morning came another remission, with sleep, if it could be so called. At this time, however, in all fatal cases, the remission was suddenly changed and sleep ended, by the patient getting up, talking over ordinary matters, pitying the already dead or dying, and thankfully declaring that, except the thirsty feeling, he was as well as ever. By and by a desire to sleep was expressed; and out of that comatose slumber the patient never awakes. Some of the sufferers died in the act of drinking, others while relieving the bowels; and a few, wrangling about imaginary evils, suddenly expired. The fever, however, generally ends fatally in a comatose state, and the tranquillity preceding is deceptive only to the sufferer himself; for the pulse may be counted at 120 to 130, and sharp; the tongue is brown or black, and dry; the nares are dilated

on inspiration; the conjunctiva is often either red or yellow; there is a cold clammy sweat, hiccup, considerable mental irritability, and an unmeaning drunken look. Such was the course the disease took amongst the Europeans and natives at Foul Point, in December, 1830, in the French garrison of St. Mary's, during the sickly seasons of 1830-1-2, and at Zanzibar and the Comoros, in the reputedly healthy as well as sickly months. At Budderam, a fort three miles distant from Foul Point, upwards of 300 out of 1100 native soldiers died. In the French garrison of St. Mary's, at the periods mentioned, the mortality was one-third of the whole. Not ten per cent. of those attacked recovered; and the then commandant, M. Taureto, showed that relief detachments from Bourbon were always calculated on that ratio. At Zanzibar, in November, 1832, the captain and forty men, belonging to a French corvette, were seized, and not one survived the third day. In Madagascar many died on the second day; but most commonly, young and old, spare and plethoric, black and white, were all hurried off on the third. It is deserving of notice, that all who slept on board ship escaped: every victim seen or heard of, had passed one night on shore; and no instance of recovery was known in those who were taken on board affected. The writer had a vessel of one hundred tons moored within the reef at Foul Point under his charge, mainly for the purpose of protection from sickness. Such as remained in her all night were quite healthy; but not one slept on shore with impunity. The same occurred everywhere else. There is, however, a fact still more worth mentioning; no man labouring under any form of dysentery or diarrhœa was attacked. This was first observed at Johanna in May, 1833. Two dysenteric seamen were encamped on shore, and three healthy men, envying their inactive life, escaped from the ship, and, together with some men from an American ship, slept two or three nights in the tent. The consequence was that all died of remittent except the two former. Several other instances were subsequently mentioned; and, at St. Mary's, exemptions of the same kind were quite common. It has been mentioned that, in all fatal cases, the third day's sleep was the precursor of death. In proceeding now to trace the signs of a favourable termination, we find that this day was also the critical one; and it was, therefore, anxiously watched. If the sleep alluded to remained unbroken for six or seven hours,—if the pulse fell to 90 or 100, becoming soft and full at the same time,—and if a sweat took place, unattended by any great reduction of temperature,—the patient was reckoned out of danger. On awaking, there was no desire to get up; indeed, weakness rendered that impossible. The intolerable thirst, headache, and every other bad symptom had ceased; and no ailment remained but an acute sense of hearing, giddiness on raising the head, and soreness in the muscles of the back and limbs, resembling what is felt after a long journey on foot. The acuteness of hearing spoken of here sometimes came on during the second day in those who recovered. It was very distressing for the first six weeks or two months of convalescence: and every wave that burst on the distant reef was counted with pain and even dread. It was astonishing to behold the change wrought in three days. The entire body was emaciated to an extreme degree; and the yellow complexion, hollow eyes, sunken cheeks, and decrepid countenance, made the invalid for a long time difficult of recognition. In most cases the hair either fell out or turned gray; the limbs continued long œdematous; in many the liver or spleen, or both, increased in size; and when at length health was regained, attacks of intermittent fever, on the slightest cause, for some years, rendered life a dear purchase, in spite of perfect security ever afterwards from a return of the original malady.\* In concluding this account of the distinguishing features of fatal and favourable termination, a history may be given of such morbid appearances as it was in the writer's power, now and then, to observe, amidst opposing prejudices and other circumstances. As rapid decomposition renders interment necessary almost immediately after death, the few inspections made were very cursory. On opening the head, a clear or

\* No instance could be learned in any place of the disease recurring, and Europeans and natives alike fearlessly calculated on this immunity.

whitish serous fluid was found in considerable quantity under the arachnoid, and a similar effusion presented itself in the ventricles. The vessels of the pia mater were well marked and black. The substance of the brain, when cut across, exhibited black points of blood, and, around the ventricles, it broke down before the knife, showing a degree of softening. The lungs, liver and spleen were engorged with dissolved black blood, and the two last organs were enlarged and dark, though of almost natural consistence. The pericardium was thought to contain more fluid than it ought, and the heart had assumed a black appearance. There was a dull redness of the inner coat of the aorta and *vena cava*, which could with difficulty be removed by washing. The stomach and duodenum contained a quantity of chocolate-coloured matter, similar to, but of more consistence than what was vomited during life, and a greenish-brown bile, with which the gall-bladder was partially distended, was found in the duodenum. The mucous membrane of these parts was of a dark livid hue, thick, and soft enough to be easily removed by the nail. According to the distance from the stomach, so did the contents of the alimentary canal gradually darken, until, in the colon, the thin *feces* were quite black. Excepting a blush, such as might be expected where purgatives had been freely administered, there was no farther structural alteration in the tube; and neither kidneys nor bladder showed any thing remarkable.

"The foregoing marks of disease were seen alike in blacks and whites, and where no remedies had been employed as well as where all had been made use of.

"The medical treatment pursued at the commencement of the first sickly season at Foul Point, viz., in December, 1830, was remarkably unsuccessful, and, indeed, at no time afterwards had very much to boast of. As the disease was known only from report, no instructions had been given to apply immediately at its outset. Besides, the nausea was reckoned too trivial; and in the first Europeans seized, four in number, nothing was done until the fever was fairly developed. Aware of the value of the lancet in the tropics, and inferring it would be no less beneficial here than in the East and West Indies, venesection was employed freely and repeatedly in these four cases, as also in two others at the very beginning of the complaint. The early-drawn blood was dark and buffy, and relief was for the time procured. Purgatives of sulphates of soda and magnesia, castor and croton oil, and compound colocynth pills, with calomel, were administered, according to the condition of each patient's stomach. Soon, however, the paroxysm returned, and bleeding was again had recourse to. This time the blood was more dark and dissolved, and the second temporary relief appeared to be induced by an accumulated degree of debility, instead of any real diminution or abatement of the malady itself. In short, under these depleting and purging plans, three of the first taken ill died on the morning of the third day, and the other three lingered until the afternoon. Out of a party of nine Europeans at Foul Point, in the season mentioned, in eight of whom blood-letting had been carried to the extent of from forty to seventy ounces, only one recovered, he being the only one not bled at all. Abandoning the lancet, except in very plethoric subjects, another mode of cure was substituted, certainly as indiscriminately as the first, but not so universally useless. Believing that the early nausea might be a signal from the brain for relief through the stomach, the latter organ was cleared by antimonial solution. Permitting no early remission, vomiting was prolonged by diluents; the bowels were relieved at the same time with soap and water, by means of the pump; the hair was cut off, and a blister applied to the nape of the neck downwards, between the scapulæ; and, lastly, after the vomiting had subsided, fifteen grains of calomel, with one grain of opium, were exhibited. If, at the end of two hours, the stomach was not quieted, the calomel was increased to a scruple, and again given with the opium. Proper cooling and effervescing drinks, chiefly made from the lemon, which grew everywhere, allayed the thirst; and evaporating lotions were applied to the head. As soon as a purgative could be retained, one of those formerly mentioned, or jalap, was given with the calomel; and that the whole intestinal canal might be

speedily and effectually cleared, the operation was assisted by the enema pump, as before. Until the critical day had passed, the calomel, conjoined or not with opium, according to circumstances, was repeated every four hours in doses of ten, fifteen or twenty grains; and every eight hours, at farthest, free alvine evacuations were procured. In this manner quantities of thin, offensive, pitchy fæces were got rid of, the vomiting was arrested entirely, the thirst mitigated, the internal burning allayed; and although the headache continued severe, yet the shooting pain abated, and the first remission was rendered more decided as well as more prolonged. On the second day and night, Dover's powder and the warm bath were added to the remedial list. The first required caution; but when it excited vomiting, the matter was more bilious-looking, and soon got under by the calomel and opium, effervescing draughts, and the liberal use of the enema machine; but nothing afforded greater relief than the warm bath did on the second night. It was eagerly sought for, not only as a grateful antidote to every ill, but, as some said, "to die in comfortably."\* By this time the headache had greatly abated; the pulse, though unaltered in frequency, was soft and regular, the skin was cooler by three or five degrees, of yellow tint in the face, and tending to transpiration. From the great local irritation caused by the blister, it was omitted in some instances; but as these omissions only proved further its efficacy in relieving the terrible head affections, it was persisted in and repeated afterwards, and the sore kept discharging by frequent renewals of the dressing. A piece of plantain leaf is the common dressing in the east, and surpasses every other by being cleanly, convenient, soothing and economical. When the sore is to be healed, the upper surface is to be applied; if not, the lower. Up to the decisive remission on the third day, this curative plan was persevered in, and, even after a favourable termination, it was not relinquished for some days, although the mercury rarely produced its constitutional effects. Contrasted with it, the method of depletion was sadly inferior at all stages. The effects of the more eligible practice thus summarily detailed were very uniform in all the different islands. In proceeding to state the rate of mortality, it must be observed that the calculation, as affecting natives only, applies to those of Madagascar, time and opportunity being wanting to gain information amongst the others. In 1830-1-2, out of ten Europeans, four only recovered, and these were men of more regular habits. With one exception, every grog-drinker died; and not one survived, if taken on board ship at any period of the complaint, whatever were his habits and temperament. The total number of sick during these three years, from Tamatave to Woehemar, was computed at one hundred and twenty. Amongst the natives, out of some hundreds treated, more than fifty per cent. recovered. It was calculated that about three hundred in every one thousand were attacked, and this great immunity (whilst not one European who slept on shore escaped, unless he was, as already stated, affected with dysentery or diarrhoea,) can only, as in other countries, be attributed to acclimatization. At St. Mary's, where blood-letting, blistering on arms and legs, kermes mineral, tisanes and lavements were trusted to, it has been stated that recoveries were ten per cent. Amongst the native population of that island, also those of the Madagascar main, from Tamatave northwards, who, under their own care, did nothing but drink burnt rice-water, and drench themselves with castor oil and infusions of glycyrrhiza, the proportion differed little or none. At Foul Point, where venesection was pursued, every man died; so also, as related, did forty-one men belonging to the French corvette at Zanzibar, treated on the same plan as their countrymen at St. Mary's. Many similar instances of whole-

\* No little difficulty was met with in getting a vessel suitable for the purpose. A canoe was first tried, but was soon relinquished for the native bath. This was simply a bullock's hide newly flayed, attached by the corners to bamboos, so as to hang loose in the middle. It was very comfortable, and easily renewed where cattle sold for five dollars a head. Travellers improve their account of this kind of bath, by saying that the sick of some countries to the eastward are immersed in the still living entrails of the animal.

sale mortality could be adduced, but they correspond so exactly in the aggregate with those already mentioned, that they need not be gone into.

16. *Intermittent Insanity.*—M. BALLOTTA relates, in the *Bulletino delle Scienze Mediche*, 1843, a case of mania which had continued seven months—presenting a perfect tertian type. The patient was a female, forty-five years of age, who was attacked with encephalitis, caused by severe mental anxiety and exposure of several hours to a burning July sun, and which continued seventeen days, endangering her life. Convalescence became established on the 18th day, and she ate and talked with her family as usual. The 19th day she was attacked with acute mania, which continued until evening, when she became calm, ate with good appetite and slept well. The 20th she was perfectly well and tranquil all day; but, on the 21st day, there was a repetition of the scene of the 19th day. From this time up to the 11th April, 1843, when Dr. B. reported the case, the same condition of things continued. Quinine, and all other remedies, had failed to arrest the return of the paroxysms.

17. *Deaf and Dumb Child restored after the discharge of Worms.*—Dr. SCHLEIFER relates, in the *Oesterreichische Medicinische Wochenschrift*, the case of a child 9 years of age who became deaf and dumb after suffering in early life from cutaneous eruptions, engorgement of the glands, &c. The loss of hearing was attributed principally to a fall and treated accordingly. The child became meagre and pale, dark around the eyes, the muscles of the face were in constant motion, the tongue white and loaded, breath offensive, constantly moaning, abdomen large and hard. Dr. S., suspecting worms, treated the child accordingly. In three weeks the child passed 87 lumbrici, and innumerable ascarides during five weeks, and at the end of the sixth week the patient had recovered hearing and speech.

18. *On the motive for the Scarification of the Gums during dentition.*—Dr. MARSHALL HALL says that there is no practical fact, of the truth and value of which he is more satisfied than that of the effect and efficacy of scarification of the gums in infants, and not in infants only, but in children. "The process of teething," he observes, "is one of augmented arterial action and of vascular action generally; but it is also one of augmented nervous action; for formation, like nutrition, secretion, &c., generally, is always one of nervi-vascular action, and of this the case in question is, from its peculiar rapidity, one of the most energetic. Like other physiological processes, it is apt to become, from that very character of energy, pathological, or of morbid activity. It is obviously, then, attended with extreme suffering to the little patient; the brain is irritable, and the child is restless and cross; the gums are tumid and heated; there is fever, an affection of the general vascular system, and there are, too frequently, convulsions of various degrees and kinds, manifested in the muscles which move the eyeball, the thumb and finger, the toes; the larynx, the parietes of the respiratory cavities; and the limbs and frame in general, affections of the excito-motor part of the nervous system, and of the secretions of the liver, kidneys and intestines, affections of the ganglionic division of that system.

"What is the precise cause and source of these formidable effects? Can the mere tension and irritation of the gum situated over the more prominent part of the teeth be the cause of such extensive morbid actions? I think not. The real source of these phenomena is in the entire dental system, in which actions of unusual energy and extent are going on,—sub-inflammatory they might be called, were they not, in reality, of an essentially different nature and origin. This undue action takes place in the fangs and sockets of the teeth in their whole extent, with their connections, vascular, nervous and membranous. But the focus from which the nervous actions emanate is, I believe, not as is generally imagined, the nerves of the mere gums seated over the prominent parts of the teeth, but the nerves which may be emphatically termed *the nerves of the teeth themselves*, the nerves which enter into the very fangs and substance of the teeth.

"It is to the base of the gums, not to their apex merely, that the scarification should be applied. The most marked case in which I have observed the instant good effect of scarification was one in which *all the teeth had pierced the gums!*"

"This view of the subject may assist in removing the futile objections of some who have, without due consideration I am convinced, opposed my plan of frequent, often daily, scarification of the gums, to whom I would say, as my sole reply,—Better scarify the gums *unnecessarily* one hundred times than allow the accession of one fit or convulsion from the neglect of this operation, which is equally important in its results and trifling in its character.

"And it is not merely the prominent and tense gum over the edges of the teeth which should be divided; the gums, or rather the blood-vessels, immediately over the very *nerves of the teeth*, should be scarified and divided, as you would divide the vessels of the conjunctiva in inflammation of that membrane.

"Now, whilst there is fever or restlessness, or tendency to spasm or convulsion, this *local blood-letting* should be repeated daily, and in urgent cases even twice a day. I would here repeat my maxim,—Better do this one hundred times unnecessarily than have one single fit from the neglect of so trifling an operation. A skilful person does it in a minute, and in a minute often prevents a most serious attack,—an attack which may cripple the mind or limbs, or even take the life of our little patient, if frequently repeated. There is, in fact, no comparison between the means and the end, the one so trifling, the other so momentous."—*Lancet*, May 18, 1844.

19. *Counter-irritants*.—The following rules derived from the tone and frequency of the pulse are suggested by Mr. Atkinson, of Westminster, for the application of counter-irritants, and are stated to be derived from the physiological law:—The greater the irritability of the constitution the greater will be the sensibility of the cutaneous surface. His observations chiefly apply to the time required for the production of the full therapeutic action of this class of remedies. If the pulse is turbulent, wiry and frequent, as from 100 to 170, from ten minutes to half an hour's application will do; if from 80 to 100, small and wiry, then from a quarter of an hour to two hours may suffice. In both these states of the pulse, if the skin is moist, a longer time will be required. In a slow pulse, under 70 in a minute, when there is some degree of softness accompanying it, from twenty to forty hours, on an average, may be safely relied on, as not being too long for full effects. We select the following cases as illustrative of the preceding remarks:—

Case 1. J. C., aged sixteen years, was suddenly attacked with typhus, and the ordinary remedies were administered. During the progress of the disease it was found necessary to have recourse to blisters and sinapisms to relieve the cerebral congestion commonly present in typhus. At this stage of disease the pulse was irregularly quick, wiry, and numbered about 150; a blister was applied to the nape of the neck, and sinapisms to the calves of the legs. The former vesicated satisfactorily in a quarter of an hour; the latter could not be endured longer than five minutes.

Case 5. A child, aged one year and six months, had suffered under congestive pneumonia; pulse 170. A blister was applied over the sternum, which had the wished-for effect within a quarter of an hour.

Case 7. A lady, aged sixty-three, who had for the last twenty years laboured under a bronchial affection, with profuse expectoration, at different seasons of the year, became a sufferer from influenza. Her pulse was small and wiry, average 130. It was thought advisable to apply a sinapism to the chest; it could not be endured more than ten minutes. A week after this, through the abatement of the disease, the pulse became lower, softer, and hardly increased to 76, and the poultices were re-applied, when it became clearly evident that they could be endured with impunity for more than half an hour.

Case 10. M. C., aged twenty-six, was suffering from chronic rheumatism in the right arm and shoulder. A blister had been applied over the part affected. The pulse was weak and small, not exceeding 68 beats in a minute. It was

directed to be removed after the expiration of thirty hours, and being attended to at the period mentioned, the vesication was complete without rupture of the cuticle.—*Lancet*.

Mr. Atkinson gives short notes of ten cases, the results of which we have thrown together in a tabular form, arranging the cases according to the frequency of the pulse.

	Age.	Disease.	P.	Blister.	Sinapism.
4 Infant	7 m.	Convulsion	rapid		2 min.
5 Child	18 m.	Pneumonia	170	15 min.	
1 J. C. M.	16	Typhus	150	15 min.	5 min.
7 Female	63	Influenza	130		10 min.
9 S. A.	19	Fever	130	5 hours	
8 Male	25	Bilious Fever	90	8 hours	
7 Female	63	Influenza	76		30 min.
10 M. C.	26	Chr. Rheum.	68	30 hours	
2 Male	18	Influenza	65		1½ to 2 hrs.
3 Male	62	Hemiplegia	62		2 hours

*Prov. Med. and Surg. Journ.*, June 12, 1844.

20. *Savin in Menorrhagia*.—Some observations on the employment of the *Juniperus Sabina* in hemorrhage from the uterus have been made by M. Aran, from which it would seem to be occasionally a powerful agent in checking these discharges. Much has been said on the properties of *savin*, as an emmenagogue, and on the effects of this drug in causing abortion, and considerable difference of opinion as to its powers and mode of action would seem to exist amongst competent authorities, some of which have recently been referred to and quoted by Dr. Shapter, in this Journal. Several foreign authors, however, and among them, Wedekind, Gunther and Sauter, disregard altogether its supposed tendency to cause uterine hemorrhage, and on the contrary recommend its use in cases of this description.

M. Sauter says, that *savin* is one of the most powerful curative means, not only in menorrhagia, and other diseases in the non-parturient, designated by the terms atony, asthenia, debility, defect of contractility or cohesive force, but also in those hemorrhages which threaten abortion, occurring in pregnant women, who, from debility, have already had several miscarriages. He states that in these cases he has given the powder of *savin*, in doses of from 15 to 20 grains, three times a day, during three, four and five months, and that he has, in this manner, frequently succeeded in arresting the hemorrhage and preventing abortion, the infants being born healthy at the full period.

The following cases, among others, are mentioned by M. Aran:—

A worker in embroidery, aged 33, under the care of M. Gendrin, at the Hotel Dieu, had been recently delivered of a child, and since her confinement had suffered from attacks of menorrhagia returning at irregular intervals. She was much weakened and her general health had begun to deteriorate. The neck of the uterus was neither swollen nor painful; but a soft elastic circumscribed tumour could be felt projecting before the anterior fold of the vagina. Powdered *savin* was administered, and in two days the hemorrhage ceased, and the uterus was restored to its healthy condition.

A woman, aged 28, also a patient of M. Gendrin, had suffered from menorrhagia for eight months, almost continually, but without uterine disease. *Savin* was administered, and on the third day the hemorrhage was arrested. About six weeks afterwards it returned; the uterus was now somewhat swollen, and sensitive to the touch. She was bled from the arm and the *savin* again given. The hemorrhage immediately ceased.

A lady, of a bilious-sanguine temperament, and robust constitution, was attacked with menorrhagia after a fatiguing walk. The hemorrhage was neglected and had lasted for three days, when M. Aran was called in. He found her in bed, with the countenance excited, the mouth dry and complaining of urgent thirst, and of dragging pains in the hypogastric region, which was tender on

pressure; the hemorrhage still continuing, although not very copious. The horizontal position, cold to the hypogastrium, and a bleeding from the arm were ordered. The bleeding was followed by great relief, the menorrhagia was stopped, and the patient, thinking herself cured, returned to her avocation. The same evening the hemorrhage reappeared; bleeding could not be again had recourse to, and one gramme and a quarter of savin was immediately given in three doses. On the following day the menorrhagia had completely ceased; and, notwithstanding that the patient would not remain in bed, did not again appear.

A young married lady, a blonde and of lymphatic temperament, was attacked at the catamenial period with profuse hemorrhage, which continued for eight days. M. Aran found her with no symptoms of deranged health, with the exception that she was somewhat pale. Three doses of savin, of forty centigrammes each, were administered at intervals of two hours. The following day the hemorrhage had almost ceased, and another dose of the savin entirely put a stop to it.—*Ibid.*, from *Gaz. Méd. de Paris*.

21. *Ossification and Obliteration of the Vena Portæ.* By Prof. GINTRAC.—A man, forty-five years of age, an old retired soldier, but employed in teaching recruits, two years ago was treated for palpitations and difficult respiration, and abdominal dropsy. He was then only partially relieved; all his symptoms remaining more or less. On the 10th of June he was admitted into the Hospital St. André, when he presented the following symptoms:—Dyspnœa, increased on walking; strong tumultuous action of the heart, with distinct *bruit de soufflet* and slight *bruit de raphe* over the sternal region. Pulse calm, but full. Tongue dry, and red on the margins and tip, but covered on the centre with a brown fur. Abdomen distended, tympanitic in the centre, dull, and with distinct fluctuation at the sides. Gums bleeding, but not livid; epistaxis, thirst, anorexia, headache, &c. He died in a few days.

The cellular tissue was generally infiltrated with a serous fluid. The heart was large. The aorta, at its origin, and for nearly the half of its extent, had a mottled appearance, consisting of reddish spots, rounded white projecting spots of a cartilaginous consistence, and of others which had a pustular aspect. The peritoneal cavity, otherwise healthy in appearance, contained several pounds of liquid serum. The liver was pale or whitish, and irregularly wrinkled or mammillated on its surface. The gall-bladder contained a medium quantity of somewhat thickish yellow bile. The biliary ducts had a normal disposition. The *vena portæ*, above the junction of the splenic and superior mesenteric veins, was filled completely by an old clot which adhered to the inner membrane. The clot was solid, and of a pretty deep black colour. At the same part of the vein several osseous plates were observed several lines in diameter. They were placed between the inner and middle coats of the vein, but had but little adhesion to either. All the abdominal veins which ended in these vessels were gorged with blood, and were varicose.

Professor Gintrac attributed the ascites to the obliteration and ossification of the *vena portæ*, and considered that this case proved, that though obliteration of that vessel probably modified the secretion of the bile, it did not prevent it altogether, but that it materially interfered with the nutrition of the liver. The blood of the *vena portæ*, he hence infers, contributed to the nutrition of the liver, but is not indispensable to the secretion of bile.—*Ed. Med. & Surg. Journ.*, from *Journal de Méd. de Bordeaux*, Jan. 1844.

22. *Succinate of Ammonia—a remedy for Delirium Tremens.*—M. SCHARN has successfully employed the succinate of ammonia for the cure of delirium tremens. The most furious delirium is quieted by the remedy as if by magic, and the disease cured by it in a few hours without the aid of any other medicine.—*Journ. de Pharm.*, March, 1844.

23. *Rupture of the Heart.*—Mr. NASON forwarded to the Birmingham Patholo-

gical Society a specimen of rupture of the heart. The ruptures, three in number, are situated in the middle of the anterior face of the left ventricle. The one above, the largest, extends downwards and outwards, has very irregular and ragged edges, and is capable of admitting the points of the first two fingers. The middle one is situated below the inner termination and on a level with the outer termination of the rupture just described; it is capable of admitting a goose-quill. Underneath these is situated the third rupture, which is large enough to admit the point of the middle finger; its edges also are ragged and irregular.

The parietes of the ventricle are soft and flabby, and very much thinned, especially anteriorly; the aortic valves healthy, but puckered; the lining membrane of the aorta studded with atheromatous deposit. The coronary arteries arise as usual; the descending branch of the left coronary, as it passes down along the line of the septum of the ventricles, towards the apex of the heart anteriorly, is obliterated by ossification; all the other branches of the coronary arteries are healthy. The right auricle, the tricuspid valves, and the right ventricle, are healthy.

Mr. Nason says, "The man was seventy-two years old, very lame from attacks of sciatica or chronic rheumatism of the hip-joint. About three years before his death, I saw him with inflamed and œdematous legs, which yielded to diuretic medicine. He never complained of any affection of the chest, or difficulty of breathing. The day before he died, he told his wife he felt pain in the left side of the thorax. The following day, about noon, he walked a few yards from the door, and dropped down and died in a moment. On a post-mortem examination, the viscera in the abdomen were healthy, as also those of the chest, with the exception of the heart. The pericardium was completely filled with black blood, partly coagulated. I fancy my fingers made the lower opening in drawing it out, so as to divide the vessels as high as I could. There is no doubt the upper opening was a rent, from the thin and softened state of the parts, and that it gave way at the moment of the man's death. Is it not rather strange to find disease of so extensive a nature without any striking symptoms during life?"—*Prov. Med. & Surg. Journ.*, Aug. 7, 1844.

24. *Of the Nature and Treatment of Aphthæ.*—Next to the induration of the cellular tissue, the disease which carries off the greatest number of newly-born children in the foundling hospitals is thrush. Hitherto we have been entirely ignorant of the cause and nature of this serious disease. The greater number of pathologists saw in aphthæ only a pseudo-membranous production consecutive on an idiopathic inflammation. With others it was a symptomatic inflammation. Neither were medical men agreed as to its mode of transmission; some regarded it as contagious, while others formally denied that it was so. According to the researches of M. Gruby, thrush is produced by the development of a cryptogamic plant.

Aphthæ present themselves in the form of white masses, covering the whole of the mucous membrane of the mouth, and extending sometimes into the pharynx, œsophagus, stomach and small intestines. The commencement of the disease is characterized by small, conical, whitish elevations, twenty-five millimetres in diameter, dispersed over the mucous membrane of the mouth; these elevations soon increase in size, and extend rapidly in the form of a pseudo-membrane strongly adherent to the subjacent tissue, from two to three millimetres thick, and covering sometimes the whole extent of the alimentary canal. A portion of this substance, examined under the microscope, is found to be wholly composed of a collection of cryptogamic plants. The roots are implanted in the cellules of the epithelium; they are cylindrical, transparent, and about 1-480th of a millimetre in diameter; during the development they perforate the entire series of cellules which compose the epithelium, to arrive at the free surface of the mucous membrane. The stems, which spring from the surface of the epithelium, are equally transparent, are divided at certain distances by septa, and contain corpuscles in their interior; they are cylindrical, straight, about one-fourth of a millimetre in length, and 1-400th of a millimetre in width; the stems

are divided into branches, which are again subdivided, bifurcating at an acute angle. These branches are composed of very distinct oblong cellules, containing one, two or three round and transparent nuclei; their lateral parts have sporules here and there, and their ends especially have a great number. The diameter of these sporules is from 1-200th to 1-500th of a millimetre.

These cryptogamic plants have considerable analogy with the sporotrichium described by some botanists. As they are very fragile, they become detached by the movements of the organs lined by the mucous membrane, and becoming mingled with the food, are carried into the alimentary canal, of which they afterwards cover a considerable extent. Those children in whom this extension of disease takes place very largely, fall into marasmus, and soon die. As M. Gruby has constantly found in the white substance of aphthæ only these plants and the cellules of the epithelium, and never any production of inflammation, he deems himself authorized to conclude that thrush is nothing else than a cryptogamic plant vegetating on the living mucous membrane.

M. Trousseau employs the following collutory successfully in the treatment of thrush:—One gramme of hydrochloric acid, ten grammes of honey. He also recommends the following application:—Equal parts of finely-powdered borax and honey mixed together.—*Med. Times*, from *Bouchardat's Annuaire de Thérapeutique* for 1844.

25. *On Pain of the Loins.*—By W. S. OKE, M. D., of Southampton.—Perhaps there is no symptom more commonly met with in practice than pain of the loins, which is usually and at once attributed to bile, gravel or rheumatism; but as it may be also derived from other causes left out in a hasty decision, I shall enumerate them, and endeavour to point out the symptoms by which each may be distinguished.

Pain of the loins may be derived from the muscles, from the liver, from the duodenum, from the kidneys, from the colon, from the uterus, from the aorta, from the spine, or from matter collected on the psoas muscle independent of spinal disease.

In order to arrive at its true cause, we must endeavour to ascertain what function is principally involved, which will at once lead us to it.

*If the pain be rheumatic*, it will be increased by pressure, and by the slightest action of the muscles affected. There will probably be also rheumatism in other parts of the body, the system will not evince much disorder, the urine will be high-coloured and deposit a lateritious sediment.

*If derived from the hepatic function*, the pain will shoot upwards along the splanchnic nerves to the scapulæ; the alvine evacuations will be either deficient in, or exuberant with, bile; or show a morbid quality of that secretion; the urine will have a bilious tinge; there may be congestion of the hæmorrhoidal veins; and the spirits will be depressed.

*If from the duodenal function*, three or four hours after a meal the pain will be aggravated, shooting through towards the right side of the abdomen and remaining till the food has passed into the jejunum. Dyspeptic symptoms will prevail, and there will frequently be painful pustules breaking out about the face. I have lately met with a case in which the boils were extremely annoying.

*If from the kidneys*, the pain will shoot down the course of the spermatic nerves towards the round ligament in the female and towards the testis in the male, which will often be retracted by the action of the spermatic nerves upon the cremaster muscle. There will be more or less irritation communicated to the mucous membrane of the bladder. The urine also will be diagnostic in this instance; it may deposit mucus, calculeous matter, blood, pus or albumen, according to the nature of the case; or it may be otherwise morbid in its constitution.

*If from the uterus*, the pain of the back will arise either from disordered function or disease of that organ. In the former case the pain will be of a neuralgic character, will return in forcing paroxysms extending around the hips and hypogastric region, will be attended with hysteria, and often with increased quantity of the menstrual discharge. In the latter case the pain will be constant and

severe, extending along the anterior crural nerve half way down the thighs. There will be a thin, offensive discharge from the vagina. The countenance will be wan and sallow, exhibiting the wear and tear of organic lesion.

*If from the colon*, there will be constipation and inflation in the course of the bowel, or the fecal discharges will be of small diameter, or there will be soreness of the intestine under pressure, especially at its ascending or descending portions, accompanied by mucus, or shreds of lymph in the form of boiled vermicelli, amongst the excretions.

*If from arterial dilatation*, an abnormal pulsation of the vessel involved—the aorta, for instance—may possibly be detected by auscultation in the incipient stage of the disease, *if such were suspected*; but in a large majority of cases such a cause may reasonably escape the attention of the ablest surgeon, from there being no tangible symptom that might lead him to suspect it; and even after the dilatation has considerably advanced, it may be sufficiently large to press upon and disturb the spermatic nerves, but not large enough to project and pulsate externally, and this may, at this stage, be confounded with disease of the renal function.

A few years ago I met with a case of this kind in a man of middle age. The pain had been constant and wearing, shooting from the loins down the course of the spermatic nerves, and for a considerable time was reasonably attributed to the renal function, especially as there had been constant disturbance of this function. At length the aneurismal sac began to approach the surface and then, of course, the cause became apparent.

*If from disease of the spinal column*, the pain will be aggravated by percussing the spinous processes at this part of the spine, or by suddenly striking the toes against an uneven surface. There will be involuntary action of the muscles, especially of the flexors of the legs, diminished temperature, abnormal feelings, and more or less loss of power of the lower limbs. Should there be at the same time any unnatural projection of the spinous processes, the disease will be confirmed.

*If from a collection of matter upon the psoas muscle, unconnected with spinal disease*, the pain will be continued, dull and deep-seated, extending from the loins down the psoæ, or in whatever direction the matter may have taken its course. The pain will be aggravated by flexing the thigh towards the abdomen, and there will be difficulty in walking; moreover, there will be marks of a strumous habit and more or less symptoms of hectic fever. Should any fluctuating tumour present at the groin, or at any other point where the matter may find its way out of the body, it will be conclusive as to the nature of the case.—*Prov. Med. Journ.*, Feb. 17, 1844.

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26. *On the Treatment of Articular Rheumatism, by Tincture of Colchicum, Nitre and Blood-letting*.—Dr. E. MONNERET has made some interesting observations on these points of practice, which deserve the serious consideration of the profession. Having shown, in a preceding paper, that the sulphate of quinine had no title to rank as a therapeutical agent in rheumatism of efficacy superior to many others, he now proceeds to test the value of the articles indicated above.

Twenty-five patients were treated by the tincture of the colchicum root, eight by nitre, and nineteen by copious blood-letting.

The energy of the preparation of colchicum was first ascertained—it was very powerful. The greater number of the patients took from four to sixteen grammes (one drachm to four drachms) in the course of the twenty-four hours, in one, two, or four divided doses. No smaller dose than a drachm was ever administered, and several of the patients took it for seven, some for ten, and others for thirteen days. The medicine was not discontinued in any case until it was ascertained to have no effect upon the disease.

In eight of the patients, the diminution, or even total disappearance of the symptoms of rheumatism, coincided with the exhibition of the tincture of colchicum. The rheumatism in these cases was either of some days' duration, and was scarcely accompanied with febrile symptoms, and then ended in twelve or

fourteen days, or it was completely chronic. In either case the powerful revulsion produced by the tincture of colchicum on the bowels sufficed to suspend or to expel the disease: the improvement always coincided with the diarrhœa. In no case did the tincture of colchicum produce amendment or cure of rheumatism by any of those specific and occult properties which have been recognized in it by certain writers. In a few rare cases where its action was beneficial and rapid, it operated as a true drastic purgative. With regard to any complications which existed with the disease on the side of the heart, M. Monneret observes that it is scarcely needful for him to say that they were in nowise modified by the tincture of colchicum. If the effects of this medicine upon rheumatism, then, are nil in fact, which seems quite certain, it is much otherwise in so far as the abdominal viscera are concerned. Upon this point considerable difference of opinion appears to prevail: some say the colchicum occasions no intestinal disturbance, and that it does not purge; others maintain that it abates the pulse in force and frequency; and almost all unite in lauding its effects in rheumatism, &c. I have watched its influence in a sufficient number of instances, says M. Monneret, to have no hesitation in stating exactly what I have seen. In twenty-five patients to whom the tincture of colchicum was administered, I observed but a single order of phenomena at all referable to the gastro-intestinal system. The most remarkable among them were nausea and vomiting, diarrhœa, colic pains, and borborygmi, and the whole of these effects almost immediately followed the exhibition of the medicine in large doses, and for a certain time. In other instances, diarrhœa was the prevailing feature—there was little sickness or vomiting, but the alvine evacuations were copious and repeated. In a third and very small class the chief complaint was of nausea and vomiting without any purging.

The sickness supervened either immediately after taking the draught, or at some longer or shorter interval during the day or night. The discharges were almost always bilious, or evidently mixed with bile. The diarrhœa was generally in proportion to the dose; from one to two drachms of the tincture were followed by from two to twenty evacuations in the course of the twenty-four hours. The motions were mostly passed with acute suffering, violent colic pains in the bowels, tenesmus, and scalding of the anus. The matters passed were at first semi-fluid, but by and by they consisted in great part of a yellow and evidently bilious serum, in which floated a large quantity of whitish grains in form and colour like the ova of a fish's roe; there was also mixed with them a quantity of red matter like scrapings of meat, and some blood more or less mixed with mucus.

Vomiting was scarcely induced by a smaller dose of the tincture than from two to four drachms in a draught; it will not follow one drachm, two drachms, or even three drachms administered in a large quantity of uisan. Several elements enter into the consideration of the therapeutical effects of medicines: the dose, the mode of administration, and the intervals of repetition. The effects of remedies are signally different from those generally seen when they are given in large and closely repeated doses. Three drachms of tincture of colchicum in two doses, one close upon the other, produce effects which are not only more energetic, but also different from those generally witnessed.

It is obvious, therefore, that colchicum in tincture exerts its agency especially upon the bowels. Of what nature is this agency? The diarrhœa, the dysenterical character of the stools, the severe griping which follows its exhibition, do not continue as in cases in which the intestinal mucous membrane is truly inflamed; its effect is mainly to alter the secreting faculty of the intestines—the fluids habitually poured out are increased in quantity, and changed in quality.

Colchicum appears to have no effect upon the urinary secretion; and must, therefore, be rated from the number of diuretics.

*Blood-letting.*—In nineteen cases of acute articular rheumatism, desiring to ascertain the effects of a somewhat energetic antiphlogistic treatment, the patients were bled at least three times each in the course of the four first days, and cupping was further had recourse to around the affected joints, or to the region

of the heart: in two of the cases were tartar emetic and digitalis exhibited simultaneously. The quantity of blood abstracted was considerable,—large; and the venesections were repeated at short intervals. The mean stay in hospital of the patients thus treated was fourteen days—about the same as when other plans of treatment were employed.

The effect of the blood-letting on the disease can always be judged of by the state of the pulse: if it becomes less frequent, and loses force and volume, and if the temperature of the surface at the same time declines, the disease will end; if the pulse continues frequent, the disease is not yet at its conclusion. Sometimes the pulse falls suddenly after the first or second bleeding and the disease appears about to be subdued; but it soon rises again to its old number, and matters go on as if there had been no prospect of amendment: the gradual and enduring fall of the pulse is the best sign of improvement; if it falls from six to twelve beats below its usual number, so much the better.

When the symptoms are not relieved by the blood-letting within the first four or five days of the invasion of the disease, it is vain persisting in the abstraction of blood; the practice then is only injurious; bellows murmurs are set up in the heart and great vessels, the surface becomes drenched in sweat, the sleep is disturbed, the pulse is rapid, and the pains, far from diminishing, flit about from one joint to another, or remain obstinately fixed in those that were first attacked. The conclusion, on the whole, in regard to blood-letting is that in moderation it is useful, especially when practised early in the disease, within the first four days; after this, depletion by the lancet only reduces the patient, and renders his recovery more difficult.

*Nitre*.—Eight patients only were treated with nitre, and of the number one was affected with meningitis cerebro-spinalis, another with pneumonia. In all the rheumatism was recent and severe. The medicine was administered in doses of from eight to thirty grammes (two to seven and a half drachms) dissolved in tisan. Its influence appeared to be absolutely nil in the whole of the cases. The pains in the joints, the signs of endocarditis, underwent no kind of diminution under its influence. The pulse was not lowered, the febrile heat was not lessened by it. The quantity of urine passed in the twenty-four hours was not increased. In order to control the disease it was necessary, in every case, to have recourse to other means.—*Lond. Med. Gaz.*, May, 1844, from *Archives Générales*, March, 1844.

27. *Paralysis of the Œsophagus followed by Hemiplegia, cured by Electro-magnetism*.—We extract the following notice of a case of Dr. SHEARMAN'S, from an interesting summary by Mr. Law, of the Scientific Transactions of the Sheffield Medical Society, in the *Prov. Med. and Surg. Journ.*, (May 15, 1844.)

"The patient, a lady, was fifty-one years of age, and had suffered for some months from tic douloureux of the right inferior maxillary nerve. On January 31, 1841, she was suddenly seized with an extraordinary attack of vomiting. She fainted, and had loss of power over the arms when in the upright, but not when in the recumbent posture. On the evening of the 1st of February, she found it impossible to swallow any thing, and the sickness subsided. There were no symptoms of inflammatory action. Subsequently she had paralysis of the left side of the face, and of the right arm and leg. The patient became exceedingly feeble, and neither external nor internal stimulants had any effect. Dr. Shearman treated the case as he would have done if it had been one of palsy, succeeding a slight fit of apoplexy. Nothing could be introduced into the stomach except through the Œsophagus tube. On the 25th of February, electro-magnetism was applied, with the sanction of Sir A. J. Knight, to the back of the neck and chest in the course of the Œsophagus, to the left side of the face, and from the spine in the course of the nerves to the right arm and leg. This was done one hour at least three times a day for a month, and afterwards twice a day. The nutritious and stimulating injections into the stomach were continued until March 9th, when she could swallow so well that the Œsophagus tube was unnecessary. Pretty good doses of quinine, and other stimulating

tonics, in the way of nourishment, were administered; and great attention was paid to the digestive organs. On the 26th of June she could walk up and down stairs tolerably well. From this time, the electro-magnetism was gradually discontinued. She got quite well, and is so at this moment.

"This is clearly a very rare case. While it was going on, Sir A. J. Knight and Dr. Shearman consulted all the authorities within their reach without obtaining any information respecting it. Dr. Shearman referred the case to Dr. Abercrombie, who acknowledged that he was quite at a loss with regard to the state of the spinal cord. There can be no doubt that in this case there was no structural disease. This seemed to be the general opinion of the society. With respect to treatment, the writer doubts whether the electro-magnetism is entitled to the credit of having effected the cure; or whether this should be attributed to the quinine, stimulating tonics, and the great attention which was paid to the digestive organs. Paralysis occasionally terminates favourably quite irrespectively of medical treatment, and the acknowledged obscurity in which the proximate cause, in the case under consideration, was involved, demands especial caution in assigning to each of the various means employed in the treatment, its due share of credit. It is by no means impossible, that the electro-magnetism, instead of having carried off the complaint, retarded the cure; and that this was ultimately accomplished by nature, assisted by the general treatment. Until a series of cases treated with, have been contrasted with a parallel series treated without electro-magnetism, it would be unphilosophical to pronounce a decided opinion on this principle as a curative agent in paralysis. Although the writer has employed electro-magnetism in a variety of cases, during the last twelve months, yet he has hardly been able to verify a single observation of any one of its numerous and zealous advocates. Dr. Shearman used either the negative or positive pole, as chance directed. Now Ritter asserts that the former diminishes, while the latter augments the powers of life, and J. D. Humphreys, medical galvanist, with Chas. Woodward and others, says that the positive pole exerts a salutary influence, by exhilarating the spirits, and infusing feelings of energy and strength; while the negative excites a sense of exhaustion and of irritation. These writers distinctly state that the only effect of the negative pole, if applied to the seat of a disease, would be to aggravate its worst symptoms. How are these opinions to be reconciled with Dr. Shearman's belief, that he had cured his patient by an indiscriminate use of the oxidating and deoxidating electricities?

"Dr. Wilkinson, Dr. Hodgkin, Mr. Ware and Mr. Carpue ascribe wonderful power to electro-magnetism in diseases affecting respiration, circulation, digestion and secretion. According to these gentlemen, there is hardly a complaint which it will not either cure or relieve; or an indication in therapeutics which it will not satisfactorily fulfil. The writer can reconcile the discrepancies between the statements of authors and his own experience only by supposing that the publications on this subject contain many errors. With respect, however, to the case under consideration, it is right to say the society generally agreed with Dr. Shearman, in ascribing the cure to electro-magnetism; and that Dr. Abercrombie speaks rather favourably of this agent."

28. *Bronchocle.*—Dr. B. R. MORRIS calls attention to rheumatism as an occasional cause of goitre, and relates three cases of the disease which he attributes to that cause. In one of these cases a cure was effected by the use of half a drachm of hydriodate of potass in an ounce of soap liniment, rubbed into the tumour every night.—*L. and E. Month. J. Med. Sc.*, Aug., 1844.

29. *Paralysis of the Organs of Sense after Scarlatina: Recovery under the use of Iron.* By Dr. HOFFMAN.—A healthy girl, nine years of age, whilst recovering from a trifling attack of scarlatina, and without assignable reason, was observed to be dull of hearing; by and by, to be blind, or to see very imperfectly; then to have lost all sense of taste, and finally, to be without smell; the common sensation and power of motion were unaffected. This state of affairs

continued in spite of every approved plan of treatment essayed under the eyes of the best practitioners in the neighbourhood: internal medicines of all kinds, baths, sinapisms, blisters, moxas, and animal magnetism (!) The child was now put upon a course of steel, and a little wine was ordered for her, and with such good effect that in three weeks she was again restored to perfect health.—*London Med. Gaz.*, May, 1844, from *Cusper's Wochens.*

30. *Abdominal Hydatids.*—Dr. GAIRDNER read to the Medico-Chirurgical Society of Edinburgh, May 1, a remarkable case of abdominal disease, in which he had twice withdrawn by paracentesis from the peritoneal cavity, a quantity of a glutinous substance, resembling, in colour and consistence, calf's foot jelly, and coagulating, like the albumen of eggs, by heat. Some of this matter Dr. G. had exhibited to the society in January, but in a comminuted state, in consequence of having passed through the canula, and the valves of the syringe adapted to it for suction. After the death of the patient in February last, it was ascertained that the whole abdomen was filled with similar matter, amounting in all to about twenty-four imperial pints, and that it consisted of rounded masses having very much the same outward appearance as the ordinary acephalocysts of Laennec, but differing from them in many important particulars. These remarkable parasites had invaded the textures of the liver and omentum, as well as of some of the other viscera. The right lobe of the liver was entirely destroyed by them; the left partially; the omentum converted into a dense and almost cartilaginous tumour, of large size and great thickness, in which many of the parasites were contained, and from which many of them hung pendulous. Dr. G., after detailing the facts of the case, gave a condensed account of the results of his inquiries into the literature of the subject. He found that extensive destruction of the liver by hydatids, was by no means uncommon, and that there was one or two recorded cases, and more especially a very remarkable one by Ruysch, in which the destruction of this organ appeared to have been equally extensive as in his own case. He had not been successful in finding any case in which the omentum had undergone a change of the same sort precisely with that which he had described. Finally, he had examined attentively all the systematic treatises on entozoa in general, or on hydatids in particular, which were accessible to him, besides a great number of pathological works and individual cases in which they were incidentally described, and he had not yet found a single description of a parasite possessing the same physiological and structural peculiarities. He was therefore of opinion that it was a rare one; and that, although it had, in all probability, been occasionally seen, its peculiarities had not yet been observed or described.

*Structural and Physiological Peculiarities of the above Entozoon.*—Mr. GOODSIR read to the society an account of the structural and physiological peculiarities of the entozoon found in Dr. Gairdner's case, by Mr. Henry D. S. Goodsir. Mr. Goodsir, after quoting from his brother's paper, read to the Royal Society a description of the animal in question, explaining more particularly the structure of the parasite,—stated as its most distinctive peculiarity, the fact, that instead of being like the common acephalocyst, a simple animal, it might be regarded as being of a composite nature. It appeared to consist of several cells, having in their interior a glutinous matter contained in cellular tissue, connected together by a common membrane extending from the free surface of the peritoneum over the surface of the various cysts, and forming their pedicles. On the surface of this membrane, except on the part covering the globular cysts, there were seen numerous circular discs, around the margin of which were a series of stomata opening into tubes extending into the substance of the membrane. These Mr. Henry Goodsir regarded as being the nutritive organs of the animal. With regard to its reproduction, Mr. Goodsir remarked that this took place in two ways, one which respected the extension of the individual existing group, the other as regarded the propagation of the animal to uninfected tissues. This, like the common hydatid, did not enlarge from cellular development, but by simple expansion of the original germinal vesicle. As regards its propagation

to uninfected tissues, Mr. Goodsir stated, that he had been unable to trace the earlier process by which an ovum appeared in the healthy tissue, but he found that when this had occurred, the ovum enlarging makes its way like an abscess to the free surface of the organ, and bursts, leaving an orifice leading into a cavity of the tissue. The formation of these cavities gave to the peritoneum the honey-comb appearance observable in Dr. Gairdner's preparations. After the bursting of the sac, the animal is not discharged from the cavity, but remains attached by its common membrane to the base of the cavity, and then projects outwards elongating its outer membrane so as to form a pedicle.—*L. and E. Monthly Journ. Med. Sci.*, August, 1844.

31. *Hydrochlorate of Ammonia*.—In the medical treatment of pleurisy, and in subacute inflammation of the lungs, and congestions of the mucous membrane, Sir GEORGE LEFEBVRE states that he has availed himself very satisfactorily of a German remedy, which is almost universally employed in such cases, the hydrochlorate of ammonia. In English practice it has generally been confined to external use, but by the Germans it is employed in a great variety of internal complaints, and occupies in part the place of the nitrate of potass. Its employment is confined to subacute affections, congestive states of the mucous membrane of the bronchia, and the chronic affections of the serous membrane; where inflammation runs very high the nitrates of potass and soda are preferred. Hydrochlorate of ammonia has no very decided action on the system, although it sometimes stimulates the kidneys; but it is considered to be deobstruent, and to unload the vessels gradually, so that convalescence is achieved without any critical evacuation. It relieves thirst, and the tongue gets unloaded under its use. It has certainly a decided action on the mucous membrane generally, and is useful in old coughs, accompanied by gastric derangement. The combination of hydrochlorate of ammonia, with tartarized antimony, is regarded by Sir George Lefevre as a valuable mode of administering this remedy. The following is the form usually employed:—

Hydrochlorate of ammonia, . . . . .	1 drachm.
Extract of liquorice, . . . . .	3 drachms.
Tartarized antimony, . . . . .	2 grains.
Distilled water, . . . . .	8 ounces.

A large tablespoonful of this mixture is administered every two hours. The antimony forms no inconsiderable part in the operation. When its nauseating effects have made sufficient impression upon the disease, it may be withdrawn, and the hydrochlorate continued by itself. In many cases the latter only is administered. Stomach coughs are greatly benefited by it; when the tongue is loaded, it cleans rapidly under its use. A variety of affections of the mucous membrane, sore throats, enlarged tonsils, relaxation of the uvula, &c., feel its influence.—*Thermal Comfort*.

32. *Strychnine in Chorea*.—Dr. ROUGIER has tried this powerful remedy in ten cases, and the result of his experience has enabled him to proportion the dose of this energetic medicine, in cases of this kind, with more precision and exactitude than have hitherto been obtained. His patients were chiefly young boys from six to sixteen years of age. The duration of the disorder varied between one month and four years; the longest duration of the treatment being two months, and the shortest six days. The whole of these cases were cured, one only suffering a relapse, and that yielded to a repetition of the treatment. Eight out of ten of these patients were treated by strychnine alone, the others took at the same time sedatives and camphor. The strychnine was always administered in pills, and very small doses. One remarkable phenomenon was observed in all cases, viz., an increase of the symptoms under the influence of the first doses of strychnine. The greater number experienced tetanic spasms, sometimes very alarming, but which yielded soon to the injection of a glass of cold water. After these first accidents the movements became more regular, and the disease dis-

appeared. Dr. Rougier has been led to conclude that, in order to obtain the specific action of strychnine on the complaint, it should be carried to the extent of producing a species of tetanus, or at least of augmenting, in a sensible degree, the energy of the involuntary movements. A relapse may be safely guarded against by continuing the medicine for a few days after the disappearance of the symptoms, in gradually diminished doses. The success obtained by M. Rougier is such as may encourage practitioners in a trial of this new treatment, but they should never lose sight of the fact that a medicine possessing such violent energy as strychnine, requires great vigilance on the part of the physician.—*Med. Times*, Aug. 31, 1844.

33. *Pulmonary Gangrene*.—The principal results of M. Boudet's researches on this subject are these:—

1. Gangrene of the lungs appears to be more frequent in childhood than at any other period of life.

2. It is essentially of the same nature as those other forms of gangrene that are developed spontaneously, or under the influence of putrescent fever.

3. In the child, gangrene, when it affects the lung, is rarely limited to this organ; usually, several other parts of the body are similarly affected at the same time.

4. The lower and posterior parts of the lungs are most frequently the seat of the disease. We have often occasion to observe that it manifests a remarkable tendency to attack the adjacent organs: thus we not unfrequently find the mediastinum and the pleura, and sometimes the œsophagus also, involved in the destructive process. It may extend by the mere contact of the sphacelated matter, inducing gangrene in the parts with which it comes in contiguity.

5. Gangrene of the lungs may appear in three different forms: in distinct patches, in nuclei or circumscribed masses, and in a diffused and extensive superficies.

6. It may be circumscribed, and a cure may then be effected in the child as in the adult. In such circumstances, the gangrenous corruption becomes surrounded by an organized pseudo-membrane, so that, in course of time, it is perfectly isolated from the adjacent tissues.

7. Local causes—such as inflammation, the existence of tubercles, &c., do not seem to have any direct influence on the production of pulmonary gangrene.

8. Like other spontaneous gangrenes of childhood, this form seems to be always developed under the influence of causes which act on the entire system. Thus, an unsound constitution, shattered health, imperfect or unwholesome nourishment, &c., are observed to predispose to its occurrence. But the proximate cause of the disease is unquestionably a morbid alteration of the mass of blood, consecutive upon scurvy, measles, scarlet-fever, and such like maladies, and which is characterized during life by the appearance of purple spots on the surface, softening of the gums, hæmorrhage from various parts, &c., and after death, by patches of ecchymosis, and sanguineous suffusion, and by the extreme fluidity or dissolved state of the blood. In a chemical point of view, this state of things is most probably the result of a diminution in the proportion of the fibrine, and an excess in that of the alkaline ingredients of the blood.

9. The usual symptoms of gangrene of the lungs are dulness on percussion over the affected part, resonance of the voice, mucous or gurgling râle, fætor of the breath, greenish colour of the sputa, and a peculiar expression of the features that cannot be well described by words.

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In reference to the treatment of this disease, M. Boudet makes the following remarks:—"It is almost always after measles or scarlet-fever that gangrene of the lungs has been observed to occur. Therefore, as a means of prevention, the first step to be taken should be to keep, as far as in our power, children from being exposed to the contagion of the disease. The children who may be affected with it, should be carefully separated and kept apart from the other inmates of an establishment, like that of the *Hôpital des Enfants*. Moreover, as it has been

shown by the most satisfactory researches, that the exanthemata in question are generally more severe and complicated in children that have not been vaccinated, I should most strongly urge upon all parents, as well as medical men, a more punctual attention to this most necessary precaution."

Whenever, during the progress of measles or scarlet-fever, there is observed any tendency to the occurrence of hemorrhage, or sponginess of the gums, or purpurial eruption on the skin, the physician should diligently examine the state of the lungs; for it is in such a state of the system that pulmonary gangrene is generally developed. The patient should immediately be ordered the free use of a beverage made with lemon-juice or with sulphuric acid: the affected parts of the mouth should be touched with nitric or muriatic acid; acid and antiseptic gargles should be used frequently, and the body and limbs should be sponged with an aromatic acid lotion. Dr. Boudet assures us that he has seen, in the Salpêtrière, many cases in the most advanced stage, and seemingly in a desperate condition, recover under the diligent employment of acid medicines, internally and externally administered. The acids serve to counteract the excessive alkalinity of the blood, while the cordials give tone to the system, and enable it to resist the tendency that exists to the loss of the fibrine. The application of a blister or a sinapism to the legs is often a useful adjuvant; and in many cases decoction of bark, with port-wine and other tonics, may be advantageously exhibited. Some physicians have spoken well of the use of the chlorurets, given internally as well as freely applied to the surface of the body and to the gums. As it is the lower and posterior part of the lungs that is generally affected, the position of the patient should be frequently altered, so that the seat of the disease may not always be in a depending position."—*Med. Chirurg. Rev.*, July, 1844, from *L'Experience*.

34. *The Sanability of Phthisis. The Influence of Malaria.*—The sanability of pulmonary consumption is one of those subjects which must ever command the regard of every philanthropist, and still more of every physician.

This inquiry has gradually been forcing itself upon the attention of the profession since the days of Laennec. Since his time morbid anatomy has done much for its elucidation, although it is to pathology chiefly that we turn for a thorough explication of the truth. Another interesting source of information, however, is to be found in the geographical distribution of the complaint, and its statistics in regions presenting different medical constitutions. It is to this last source that M. de Crozant has directed attention in an interesting memoir now before us, in the May number of the *Journal de Médecine*.

The part of the country which has fallen under M. de Crozant's examination lies in the department of Nevers, more especially its northern portion, the district around Cosne, and the canton of Donzy, situate on the left bank of the Loire, where the Noain joins the mighty stream, about 100 miles south of Paris, and 30 to the north of Nevers.

The Noain, with a somewhat semicircular course, from its origin at Entrains to the town of Cosne, where it joins the Loire, makes a circuit of eight or ten leagues. But ill-confined within its banks, it overflows twice or thrice a year, and for leagues around converts the whole country into a vast marsh; which is, moreover, interspersed with brushwood and skirted with forests. Hence it is scarcely ever thoroughly dried, remains moist, and makes the villages from Entrains to Donzy, and especially those of Couloutre and Perroy, the most unhealthy of the whole department. The lower portion of the river has a greater fall; and the marshes almost disappear where it joins the Loire. The soil, too, in this locality, is chalky and dry, and the forests are more scanty and distant. The communes of Sully and Saint Quentin are situate here, and are much more healthy than those named above.

The effects of the malaria in these more marshy districts are most melancholy. Intermittents prevail throughout the year,—at particular seasons are peculiarly rife, and, in fact, are quite epidemic. Population here cannot maintain itself; and the rate of mortality far exceeds that of reproduction. Old

age is unknown; and most of the labourers are strangers attracted by the high rate of wages. The inhabitants, generally, both young and old, are pale, cachectic, dropsical, and become old before their time; their spleens are hypertrophied, their livers engorged; and scurvy and struma add their traits to the other squalid features of the picture. They are dull and indolent; and misery, the inevitable result of morbid health, attends them to the tomb. It is fever alone which produces all this languor and wasting, and scarcely another disease shows itself among them.

*It is a fact that phthisis is here unknown.* M. de Crozant has corresponded with Dr. Lizon, a skilful and well-informed physician, who is familiar with all the details of practice in the district, and who writes,—“Pulmonary consumption is exceedingly rare in our communes, (the canton of Donzy,) and during the twenty years I have practised in the country, I have not seen a single case in the commune of Couloutre.” Throughout the extensive beat of this physician, the best employed in the district, and for the long period he has practised, he has only seen seven cases of phthisis, most of these having something peculiar in their origin and history, and two of them having been cured.

A few details will prove interesting. Of the seven cases, three occurred in Donzy itself, the chief town of the canton, containing between two and three thousand inhabitants. Of these three cases, one was a wool-carder; and his trade could not but influence the development of the complaint. The two others stood to him in the relationships of uncle and nephew; and these were the only invalids in the family. The other four belonged to the commune of Sully, which is much less affected by the malaria. Two of these were cured; and both resided on the banks of the stream;—the one was a miller. The other two, who died, resided in the most healthy part of the commune. To these seven cases M. de C. has added two which fell under his own observation, which was very extensive in the district;—both of these cases apparently were cured. He resided at Sully, saw a great many individuals labouring under intermittent fever, minutely examined the state of the lungs of all who applied to him for advice, and never, except in the cases specified, could discover the slightest indication of tubercular degeneration.

In descending the Noain, as already stated, the peculiar insalubrious character of the locality disappears; and, on reaching its *embouchure* in the Loire, at Cosne, the antagonism between intermittent and phthisis is much less discernible. Here phthisis frequently manifests itself, commingling with the fever, a fact which has been confirmed by Dr. Gambon, the chief physician of Cosne.

It is, therefore, only in the centre of the marshy district that the agency of the malaria should be investigated. In the commune of Couloutre, whose population amounts to 696 souls, Dr. Lizon, during the twenty years of his unremitting practice, had not seen a single case of phthisis. The commune of Perroy, which is contiguous to the preceding, and equally sickly, possesses the same immunity. It was after passing Donzy, following the course of the Noain, that he saw the seven cases already specified; and these all occurred in the same commune of Sully, with a population of 1500, a portion of whose surface forms quite a contrast to the swampy soil of the other: and, finally, upon arriving at Cosne, this complaint is sufficiently rife, and its exciting causes prevail over the influence of the malaria, which is now greatly weakened, and gradually disappears.

The four cases of the cure of phthisis, which have been observed out of the nine which manifested themselves in the environs of the marshy district, all occurred on the swampy margins of the Noain, in the commune of Sully-Latour, in circumstances which were far from promising such a happy result. As exhibiting the features of these cases, M. Crozant furnishes the particulars of all the four, and they appear in every way to vindicate their claim to be—we had almost said—desperate cases of this most fatal disorder. In illustration, we subjoin one of them.

“*Obs. 4.* In May, 1841, I was requested to visit a young lad, a miller by

trade, aged 18, who was declared by his physician to be labouring under a chest complaint; and to such a degree that he could not long survive. He was at death's door when I saw him, and it was easy to perceive that the diagnosis could not be doubtful.

"His mother was of a feeble constitution, and subject to cough; the father was healthy; he has since died, but of what disease I am ignorant. The lad himself, like all the children of the village of Sully, was emaciated and diminutive; and hardly appeared to have attained the age of 13. He had always been subject to cough, and was of a sickly habit, but this was attributed to the fever, and he was treated accordingly. At the same period of the preceding year he was confined to bed for a month by the same disease. From that time he never regained strength; and both during its course, and frequently since, he has had frequent severe attacks of hæmoptysis, with diarrhœa, and night sweats;—a troublesome cough, with abundant expectoration, never left him. From time to time he had attacks of fever towards evening, continued want of appetite, and great emaciation. Such are the symptoms which most attracted the attention of his parents.

"He had been confined to bed for three weeks previous to my visit. When I first saw him he was extremely emaciated; but this was easily accounted for by the continued and copious diarrhœa. His strength was completely exhausted; his voice was feeble and husky. He had want of appetite, bitter taste in mouth, but no pain in the bowels. The cough was frequent, occurring in fits; the expectoration purulent and solid, floating in a considerable quantity of frothy mucus. There was some crepitation under the left clavicle; posteriorly the sound was dull; but the respiration clear without *râle*; over the rest of the lung the respiration was noisy. Under the right clavicle there was strong cavernous respiration, with gurgling, and a very dull sound: the rest of the lung appeared to be healthy. I saw this patient five times during the two months I remained at Sully-Latour. I merely prescribed some trifling remedies for him, with the exception of a vomit, which I ordered, as he swallowed his expectoration from sheer weakness. I noticed no change on him during this period; and I left him in what I considered a desperate state, truly astonished that he should have survived so long.

"On my visit the following year, I was informed that my patient was on foot; that he had got rid both of his cough and expectoration, had a good appetite, and was again working in the mill. I was told he had been recommended to take *l'herbe à la forcure*, (the periwinkle, I believe,) that he had thriven under its use, and regained strength; the sweating and diarrhœa gradually diminished, and at last completely disappeared; he still continued to inhabit his damp abode, but the fever had not reappeared for the last eight or ten months. I congratulated the mother on the recovery of her son, persuaded, at that time, that she had converted a merely temporary amelioration into a complete cure. I did not wish to destroy the maternal delusion, and I did not see the lad himself.

"Last summer (1843) I did not fail, on my arrival, to inquire after the health of this lad. I was told he still continued well; and that he had gone to another mill. I hastened to see him. It was difficult to recognize in the strong and vigorous lad now before me, the diminutive-looking boy I had attended three years previously. He bore no external trace of the miserable state I had then seen him in. I found nothing on auscultation. The anterior and superior part of the right side of the chest was perhaps a little less prominent than that of the opposite side; and the respiratory murmur was somewhat fainter there than over the other parts of the thorax. He still continued the trade of a miller; travelled about the country collecting loads for the mill; carried sacks of grain on his back; was constantly exposed to all the vicissitudes of the weather, and enjoyed the most perfect health."

We close this notice with M. C.'s concluding remarks. "To what are we to attribute these cures? For myself, I cannot say. Active treatment there was none. As little was there any peculiar hygienic care or influence. All that I

can discover is, that the patients were affected within a marshy and sickly district, on the banks of the river, in the midst of low and swampy grounds."—*Lond. & Ed. Monthly Journ. Med. Sci.*, July, 1844, from *Journ. de Med.*, May, 1844.

35. *Rupture of the Aorta at its junction with the Heart.* By W. RYAN. (*Lancet*, Feb. 17, 1844.)—"The patient, a woman aged 60, died suddenly. There was a rupture at the junction of the aorta with the ventricle towards the right side. The rupture was somewhat oblique, and from the inside the handle of a scalpel could be passed into the pericardium. There was considerable hypertrophy of the heart, which was not much loaded with fat. No ossific deposits nor cause of obstruction to the circulation were found in the aorta. She had long complained much of "pain in the stomach," for which she had been under much ineffectual medical treatment.

36. *Preservative influence of Vaccination—propriety of Revaccination.*—The degree of preservative influence exerted by vaccination, and the propriety of revaccination, continue still to be debated on the continent, especially at the Academy of Medicine at Paris, where M. BOUSQUET and M. GAUTHIER de Claubry take different sides of the question. M. Bousquet (*Bulletin de l'Acad. Royale de Médecine*, Oct. 15, 1842, and Sept. 30 and Oct. 15, 1843.) is of opinion that the vaccine virus becomes weakened by its transmission through numerous individuals, and appeals to the fact that the effects produced by the renovated vaccine virus in 1836 were much severer than those which followed vaccination with the old matter. It is, however, a singular fact that the difference between the vesicle produced by the new virus and that produced by the old is not perceptible till the sixth or seventh day, by which time the preservative power of vaccination has been exerted, as is shown by the circumstance that a second vaccination after that day does not produce any effect. Still the increased frequency of variolous and varioloid affections of late years, and the fact that the greater number of persons in whom small-pox occurs after vaccination are adults, induce M. Bousquet to believe that a weakening of the vaccine virus does result from its repeated transmission through different individuals, and that the preservative power of vaccination does not extend beyond a certain term of years, though its modifying power continues during the whole of life. He inclines, therefore, to the adoption of revaccination. M. G. de Claubry, (*ib.*, Sept. 30, and Oct. and Nov. 1843.) on the other hand, insists on the absence of any ratio between the severity of the local effects of vaccination and its preservative power, and regards the symptoms which have followed vaccination practised direct from the cow merely as phenomena attending the naturalization of cow-pox in the human subject. When this has once been accomplished, the transmission of the virus through hundreds of individuals in no way impairs its virtues or modifies the character of the eruption which it occasions. In proof of this he mentions that in some places the same virus has been employed for twenty-five, thirty, or even forty years; and yet the character of the vaccine vesicle has continued unchanged during the whole time. No argument for revaccination can be drawn from the occurrence of secondary small-pox, since it occurs even in persons who have had variola once in the natural way; and M. G. de Claubry states, though on rather slender grounds, that this takes place in one of every sixty-three persons who have been attacked by the natural small-pox. He asserts, too, that varioloid eruptions were met with in the early days of vaccination as frequently as now, though their variolous nature was not then apprehended; and denies that such eruptions are by any means confined to adults. He finally endeavours to weaken the positive evidence in favour of revaccination, by showing that variella, varioloid eruptions, and variola have occurred in the Prussian army among persons who had been revaccinated.

The results of recently-performed revaccination in the Prussian army, and in a district of Silesia, are contained in the *Med. Zeitung*, Jan. 18, and April 5, 1843.

Dr. KAHLERT, of Prague, has made the experiment of passing vaccine lymph

from the human subject through the cow, with a view to increase its activity. This experiment, which is the same as M. Bousquet and Mr. Ceely performed, was quite successful. The retro-vaccine lymph thus obtained produced very characteristic vaccine vesicles in some children who were inoculated with it, but without causing any peculiarly severe constitutional disturbance. (*Oest. Med. Jahrbücher*, June, July and Aug., 1843.)—*Dr. C. West's Report on the Progress of Medicine.*

## SURGICAL PATHOLOGY AND THERAPEUTICS AND OPERATIVE SURGERY.

37. *Erysipelas—treatment with ointment of Nitrate of Silver.*—Erysipelas, the ambulant and stationary, both forms of frequent occurrence and often serious, are differently treated in the hospitals and in private practice. The method of Dupuytren, however, (flying blisters,) appears to be generally adopted, and its results are, in fact, sufficiently satisfactory. M. JOBERT follows a different method which he finds is perfect. It consists in surrounding the erysipelatous surface with nitrate of silver ointment, and the phlogosis promptly disappears. The ointment is prepared of three degrees of strength:—the first contains four parts of the salt, the second eight, and the third twelve to thirty parts of lard. The parts selected are anointed with a small portion of the ointment, at distances of a few centimetres, each spot being of the size of a dollar, and then covered with blotting paper. A simple eruption results, but never an eschar. The medicine is absorbed, doubtless, and acts dynamically like cantharides. The antiphlogistic action of nitrate of silver is now perfectly established, and its beneficial effects in all phlogoses can no longer be doubted.—*Annales de Thérapeutique*, July, 1843.

38. *Fractures of the Limbs.*—It is remarkable that, since the two dominant methods, adopted, until late years, for the treatment of fractures of the lower limbs, have lost their powerful protectors—we allude to the inclined plane and the horizontal plane of Scultetus, adopted by Dupuytren and Boyer—each hospital has its own peculiar apparatus. At La Charité, fractures are dextrined, and the patients allowed to walk about; whilst, at the Hôtel Dieu, they are faithfully treated according to the traditions of the Academy of Surgery. At the Val-de-Grâce fractures are encased [*emboîtés*], whilst, at St. Louis, they are gaitered, &c.; and, what is remarkable, the success is everywhere nearly equal. The following is the method adopted by M. Jobert. This surgeon has renounced every kind of bandage of pad and splint, at least in simple fractures. Whether the fracture be of the thigh or leg, the neck of the femur, or the shaft of this bone, the tibia or fibula, the patient is put to bed, his limb is laid horizontally, as if uninjured; a buckskin gaiter, covering the foot and lower third of the leg, is applied; to the bottom of this gaiter are attached straps with buckles. The fracture is usually set, and the straps are buckled around the iron foot-bar of the bedstead. Extension and adaptation are effected by this means at the same time—and this is the whole dressing. The straps are to be shortened more or less the subsequent days. If the fracture is at any part of the arm or forearm, the patient is put to bed, a thick glove extending over the wrist, and with straps like the gaiter. The fracture is set, the straps buckled, and all is finished. No hoops. The cures are perfect.

As is perceived, we have to return at present to permanent extension in the treatment of fractures. The method of walking about and the immovable apparatus do not appear to make much progress. M. Lisfranc has remained nearly constant to the principles of Dupuytren; we say nearly, because this skilful practitioner has beneficially modified these principles. Extension appears to us to be really necessary only in fractures of the lower limbs. It is now ten years since we maintained, in a memoir published in the *Transactions Médicales*,

that the best method of applying this system was that which we had seen practised in the Hôtel Dieu, of Lyons, in 1828, which we had adopted in 1833 in a case of oblique fracture of the thigh—this mechanism was very similar to that devised by M. Jobert.—*Annales de Thérapeutique*, July, 1843.

39. *Amputations—dressing after.*—M. JOBERT, at the Hôpital St. Louis, performed two amputations in our presence, one of the leg near the ankle for an affection of the bones of the foot, the metacarpo-phalangean articulation for ulcerated spina ventosa. We mention them merely to draw attention to an important point relative to the dressing. This surgeon united the wound in both subjects with the hair-lip suture, which is very convenient, and perfectly fulfils the aim to obtain union by the first intention, so much desired by modern surgeons. The points of the pins are cut off with nippers. Short, tight bandages, artistically arranged, complete the approximation of the edges of the wound; a pad of lint, spread with cerate, was applied over the wound, afterwards charpie, compresses and a bandage. M. Jobert thus unites all bleeding wounds, and he obtains union by the first intention more surely than by the use of bandages alone. This method appears to be more expeditious and more certain than the interrupted suture which some justly celebrated surgeons recommend generally to be used. Another means which this surgeon resorts to, in order to obtain his object, is to tie the smallest vessels, and to wash well with cold water the parts before bringing them together.—*Annales de Thérapeutique*, July, 1843.

40. *Observations on the recorded cases of Operation for the Removal of Ovarian Cysts.* By BENJAMIN PHILLIPS, F. R. S.—The object of this paper is to bring together the results of these operations, for the purpose of determining whether the plan of treatment is to be regarded as a benefit to humanity or not.

Extirpation of ovarian cysts has been practised, as appears from the tabular arrangement of the cases, at least 69 times. In 50 cases, the tumour was extracted; in 14 cases, adhesions or other circumstances prevented its removal; in 5 instances no tumour was found.

Of the cases in which the operation was completed, the tumour being extracted, 30 terminated favourably, the patient recovered; in 20, the termination was unfavourable, the patient died. Of the 5 cases in which no tumour was discovered, all recovered. Of the 14 cases in which adhesions or other circumstances prevented the extraction of the tumour, 8 recovered, 6 died. The proper way, therefore, according to the author, of looking at this plan of treatment, is to observe the number of cases submitted to operation, and the number of recoveries after the removal of the tumour. He conceived this to be the fair way, because what has happened already may happen again. Adhesions may be too strong and extensive to make removal prudent; the tumour may be other than ovarian; or, it may be, that no tumour may be found. Regarded in this light, it appears that the operation has been undertaken 69 times, and that in 30 instances the patient has recovered after the extirpation of the tumour. It is true that 43 patients survived gastrotomy, but many of them were subjected to such a fearful operation, on the one hand without necessity, and on the other without being disembarassed of the disease.

Two different plans have been followed in the operation, and it is proper to ascertain whether there has been a corresponding difference in the results. In the one plan, the incision of the abdominal parietes is sufficiently extensive to admit of the removal of the tumour entire; often extending from the ensiform cartilage to the pubes. In the other plan, the incision has had the extent necessary for the removal of so much of the tumour as would not escape through a puncture, or incision made in it before the extraction was attempted. If the tumour contains little or no solid matter, a puncture might cause the complete evacuation of the contents, and the cyst might be removed through a very small opening. The author thinks the evacuation before extraction, and not the exact length of the incision, the important distinction between the two operations.

The principle of extraction entire has been followed in 44 instances; the instances of successful removal by this plan amount to 18.

The cases in which the plan of procuring the evacuation of as much as was practicable of the contents of the tumour, before the extraction of the tumour was attempted, amount to 25; the instances of success to 12.

The evidence is then directed to the consideration of the following points:—

1st. Can we determine with certainty whether a tumour be ovarian or not? If not, have the failures been so frequent as to constitute a reason why the operation should not be attempted?

2d. Supposing a tumour to exist and to be ovarian, can we ascertain the nature of its contents as well as its connections? If not, have the failures been so many as to be an objection to the adoption of the operation at all?

3d. Are the results of this plan of treatment sufficiently favourable to justify us in preferring extirpation to any other mode of treating ovarian tumour? If so, what plan of treatment promises most success?

The general materials, together with the circumstance that the author has been present, either as principal or assistant, in six of the operations, have given him peculiar facilities for fairly considering these questions; and the conclusions he comes to are,—that we have not the means of determining with absolute certainty whether a tumour be an ovarian cyst or not, though we think the chances of error ought not to be so large as is represented by the tables; that we have no sure means of ascertaining the contents and connections of tumours presumed to be ovarian. After an elaborate consideration of the bearings of the third question, he says, the aspect in which the question should be ultimately regarded is this: the circumstances of the patient's case are so pressing that relief must be afforded, and as all other means have failed, it must be by an operation. Tapping is usually a successful operation, so far, at least, as to afford immediate relief, and in an ordinary case, the patient may reasonably expect to live four or five years, not in comfort, it is true, but requiring relief three or four times, as it may be, in a year. Extraction, though not a very painful, is a dangerous operation; the experience we possess justifies us in the expectation that, in at least 45 cases out of every 100 the tumour may be extracted, and life saved; but at the same time, it must not be concealed, that out of the 69 operations to which reference is made, 26 died, and that soon,—in fact, in a few days.

If the results already stated should be held to justify the performance of the operation of extraction, in cases of ovarian tumours, it is incumbent upon us to select the operation which is least perilous and painful to the patient. It must be borne in mind that the plan of making such an incision as will admit of the extraction entire, was employed in 44 cases, and that the recoveries, after extraction, amount to 18 cases. The plan of making such an incision as would admit of the extraction, where as much as possible of the contents of the tumour were removed, was followed in 25 cases, of which 12 recovered after extraction. The proportion of recoveries being in the one case 43 and in the other 48 per cent. The author's own experience is much more favourable, being 5 out of 6. It is evident, therefore, that the preponderance of success is in favour of what is termed the minor operation, that is to say, an operation in which the incision is as small as is consistent with the easy removal of the emptied cyst, provided it be large enough for the convenient application of the ligature around the pedicle.—*Lancet*, July 6, 1844.

41. *Amputation at the Ankle Joint.* By JAMES SYME, Esq.—It may seem a startling, but it is nevertheless a true statement, that amputation at the ankle-joint, with hardly any exceptions, may, and ought to supersede amputation of the leg below the knee. In order to establish this position, it is necessary to show, in the first place, that the stump which results from the former operation is fit for the duties required of it; and, secondly, that the patient may, under the various circumstances concerned, be relieved as effectually in the one way as the other.

The idea of amputating at the ankle-joint is not new, the operation having

been performed on the continent by different surgeons before I thought of it; and it would probably ere now have become generally adopted, but for the doubt that was entertained as to the ends of the bones being sufficiently covered to afford the patient a comfortable and useful support for the limb. For my own part, when I read of dissecting flaps of skin from the instep or sides of the foot, I felt so much distrust in the protection that could thus be effected against the injurious effects of pressure on a part so exposed to it, that I had no desire to try the experiment. But it occurred to me that by performing the operation in a different way all such objections might be obviated. This was to save a flap from the sole of the foot and thick integuments of the heel, by making a transverse incision, and dissecting these parts from the *os calcis*, so that the dense textures provided by nature for supporting the weight of the body, might be still employed for the same purpose. Two trials of this operation having proved satisfactory, I communicated them to the profession, and am glad to find that not only my colleagues in the hospital here, but also practitioners in other places have already acted upon this recommendation. The additional experience of my own practice now enables me to suggest some improvements in the mode of procedure—point out an error to be avoided—and verify the expectation formerly expressed as to amputation of the leg being hardly ever required.

The best instrument for performing the operation is a large bistoury or small amputating knife with a blade about four inches long. There is no occasion for a tourniquet, as the assistant has complete command of the vessels by grasping the ankle. In my first operations, the flap was made unnecessarily long; and I feel confident that the following directions may be trusted for exactly determining its proper extent. The incisions across the instep and sole of the foot should be curved, with the convexity forwards, and exactly opposite each other. A line drawn round the foot midway between the head of the fifth metatarsal bone and the malleolus externus will show their extent anteriorly, and they should meet a little way farther back, opposite the malleolar projections of the tibia and fibula. Care should be taken to avoid cutting the posterior tibial artery before it divides into the plantar branches, as in two cases where I did so there was partial sloughing of the flap. If the ankle-joint is sound, the malleolar processes should be removed by cutting pliers; but if the articulating surfaces of the tibia and fibula be diseased, a thin slice of these bones should be sawn off. The edges of the wound should be stitched together, and lightly dressed. When the cure is completed, the stump being conical in form, and having for its apex, or central point of pressure, the thick integument which covered the heel.

In proceeding to consider the circumstances in which this operation may be performed, it seems worthy of notice that, until a recent period, amputation of the leg was in this country generally resorted to for the removal of diseased bone, when the part affected extended upwards beyond the metatarsus. The operation of Chopart might frequently have accomplished all that was requisite, but unfortunately laboured under a prejudice which opposed its adoption. This was, that the extensors of the heel, being deprived of antagonizing action, would point the stump downwards, so as to render it useless as a support for the body. In 1829, for reasons elsewhere stated, (*Ed. Med. and Surg. Journ.*, Oct. 1829,) though there was no precedent for its performance in Edinburgh, I ventured upon this partial amputation of the foot, in a case where removal of the leg had been proposed, with perfect success, and without the slightest inconvenience of the kind anticipated. Encouraged by this result, I resolved to adopt the operation; and before long performed it six times with entire satisfaction. Since that time the operation has been established here, and regularly practised in cases admitting of its application.

Although the introduction of Chopart's operation considerably abridged the field for amputating the leg, there were still two situations in which caries frequently occurs, where it was beyond the reach of any partial removal of the foot. These were the joint between the astragalus and *os calcis*, and the ankle-joint itself. In the former of these situations, the diseased bone is so near the fibular side of the heel, that it is apt to seem within reach of the gouge or other

means of extirpation; and attempts have often been made to effect this, but seldom if ever with success, owing to the caries extending along the complicated articulating surfaces of the bones affected. I have succeeded in such a case, by making a fair breach through the foot from side to side, and passing a thick seton, which could be made the vehicle of red precipitate and other escharotics; but even this treatment cannot be depended upon, and its failure, in a case where I had ventured to indulge hopes of success, led me to think of contriving a method of amputating at the ankle-joint which might afford relief under such circumstances, and afford the patient a comfortable stump. In the case of John Wood, formerly related, (*Monthly Journal*, February, 1843,) the disease was thus situated, between the astragalus and os calcis. Soon after that case had terminated favourably, I met with another related in the same paper, where the ankle-joint itself was affected; and did not hesitate to repeat the operation. The gentleman who was the subject of it, though long in very indifferent health from other causes, now walks with ease and comfort.

Compound dislocation of the ankle-joint, either with or without that curious displacement of the astragalus which results from falling with great force on the heel, was formerly held to require amputation of the leg. The authority of Sir A. Cooper's experience encouraged attempts to preserve the limb in such cases; and in private practice both forms of the injury are now frequently conducted to a successful issue, though in general through a protracted process of recovery. But it must be admitted, that many lives have been lost, especially in hospitals, from trying to retain the limb. In the Royal Infirmary, I find that of 13 patients who had suffered compound dislocation of the ankle, and were not subjected to amputation, only 2 recovered; and even in the event of recovery, the foot generally remains in such a state of stiffness, weakness and sensibility of external impressions, as to be rather an incumbrance than a support to the patient. Now, all this danger, tedious confinement and permanent discomfort might be obviated by amputating the foot in the first instance. So long as the only alternatives were attempting to preserve the limb, and amputation of the leg, there was a strong inducement to abstain from operating. But if the patient's safety and speedy recovery may be insured by taking away merely that part of the limb which at the best can hardly be of any value either as to use or ornament, and at the same time producing a stump in all respects preferable to a shattered, stiff, irritable foot, I think there should be little hesitation in resorting to amputation at the ankle-joint under the circumstances in question.

[Professor S. gives the details of four cases, in which he amputated at the ankle-joint, and then goes on to observe,—]

It has now been ascertained that amputation at the ankle-joint may be performed so as to afford a stump in every respect convenient and comfortable, retaining the full use of the knee-joint, and enabling the patient to walk with perfect freedom. It has also been shown that by means of this operation caries of the upper range of the tarsus, of the joint between the os calcis and astragalus, and of the ankle-joint itself may be removed; while compound dislocation of the ankle, and destruction of the foot beyond the extent admitting of Chopart's operation, may also be remedied by it. But what other occasion besides this is there for amputating the leg? Malignant tumours of the tibia and fibula require amputation of the thigh, and compound fractures of the leg, so severe as to demand removal of the limb, hardly admit of the operation being performed below the knee, on account of the soft parts so near the seat of injury being unfit for healing action. The cases, therefore, if any, must be very few. In my own practice, since adopting amputation at the ankle-joint, I have removed only one leg below the knee, under very peculiar circumstances, which did not permit the milder measure to be adopted.

In conclusion, it may be remarked, that the advantages of amputation at the ankle-joint, as compared with amputation of the leg, are not limited to the smaller degree of mutilation and greater utility of the limb; since the operation is also attended with much less danger. This will appear when it is considered, 1st. How much less the shock must be, from the small extent of parts removed,

which is little more than in Chopart's partial section of the foot. 2d. That the smallness of the arteries divided prevents any risk of serious hemorrhage. 3d. That the cancellated texture of the bone exposed is not liable to exfoliate. 4th. That from the medullary canal remaining entire, inflammation of its contents and also of the veins is prevented.

In confirmation of these grounds for favourable expectations as to the diminution of danger, I am now able to add the proof of experience, since, in fourteen cases where the operation has been performed, eight in my own practice and six in that of others, there is not one fatal result.—*Lond. and Ed. Month. Journ. Med. Sci.*, Aug., 1844.

42. *New method of operating in Hare-lip.*—However ably, says M. MALGAIGNE, the operation for hare-lip may be performed, there always remains on the median line, near the free margin of the lip, an ugly depression. Several methods have been proposed to remedy this imperfection in the operation, among which may be mentioned the operating by two curved incisions, but they have all failed in effecting the desired improvement. M. Malgaigne, therefore, proposes the following plan:—The paring is commenced from above, and carried downwards. It may be done by the scissors in the same way as the ordinary operation; only when the operator has arrived so low that but a small pedicle remains, he stops. The same plan is followed on the other side. Thus two small flaps are formed which merely adhere to the lip by their pedicle. After uniting with pins the two sides of the labial division in its entire length, except at the lower extremity, the small flaps are turned downwards and placed in juxtaposition. The surgeon having formed his opinion as to the length which they ought to retain in order to form a substitute for the natural median prominence, then shapes them as he thinks fit, conserving a greater or less portion, according to the extent of the deficiency which he has to supply. He then completes the reunion by uniting the two flaps by means of a suture or two, or a very fine insect-pin. If the pin or suture is placed very near the free edge of the lip, the cicatrix subsequently appears scarcely visible.

This operation has been twice performed; once by its author, a second time by M. Guersant. M. Malgaigne states that in his case the operation was perfectly successful. In M. Guersant's the median tubercle appears to have been rather too large. M. Huguier proposes to use the scalpel instead of the scissors.—*Lancet*, July 6, 1844, from *Journal de Chirurgie*.

43. *Tubular Polypus of the Rectum.*—Mr. ELKINGTON presented to the Birmingham Pathological Society, a specimen of tubular polypus of the rectum removed from a child fourteen months old. The patient had been ill three months; was frequently troubled with diarrhœa and vomiting, which were thought to arise from teething. When seen by Mr. E. on the eighth of March, there was a small substance hanging down from the rectum, about one inch in length. It had very much the appearance of the end of a lumbricus, the end being curved towards the perineum. On passing the finger into the rectum, it was found to be from two to three inches long, and attached to the right side, about two inches above the anus. It had only passed through the anus that day. The child was very pale and restless, and constantly vomiting and straining; the pulse quick and feeble. The next day, rather more of the substance was down, and slight prolapsus of the gut, which he returned.

March 10th.—About three inches of the intestine down, and the whole of the polypus external, its attachment being fully exposed. It was rather conical in shape, the apex being thinner than the base, or the part attached to the mucous membrane. Above its upper surface there was a deep sulcus, but by putting the membrane on the stretch, its attachment could be exposed both above and below. It felt tubular, and had something the appearance of the appendix cœcum. The child vomited frequently, was constantly straining, and each effort forced down more of the intestine; it was restless, and constantly tossing itself about; the pulse very feeble. The only chance of saving the child appeared to be the

removal of the polypus. Mr. E.'s brother tied a ligature round it, and then cut it off. He then returned the intestine, and applied a pad and bandage. Immediate relief was obtained; the sickness and straining abated, and the child gradually improved. In less than a week it was convalescent. The day after the operation there was slight prolapsus, but it was easily returned, and did not occur again.—*Prov. Med. and Surg. Journ.*, June 26, 1844.

44. *Lipoma*.—Dr. ZAPPOLI relates, in the *Bulletino delle Scienze Mediche*, for January, 1844, a case of lipoma, in which the tumour weighing twenty-eight pounds was attached to the upper cervical vertebrae. What was curious in this case was that the patient had an extremely voracious appetite, but, nevertheless, rapidly emaciated; and the extirpation of the tumour put an end to the excessive craving for food, and restored nutrition to its natural condition.

45. *Surgical Treatment of Dropsies*.—In the second edition of his *Formulaire*, M. BOUCHARDAT has published the formula of the solution used by M. Velpeau, in the treatment of hydrocele. The following is an extract from a work recently published by M. Velpeau on the surgical treatment of dropsies. He says, being desirous of ascertaining if the serous cavities could recover by means of iodine injections, as he supposed theoretically, he performed a series of experiments, which, as will be seen, have had a double result. He practised iodine injections into the peritoneal cavity of a dozen dogs. The peritoneum was selected as being the largest cavity of the economy, and consequently, if the effects of the injection in that case were not fatal, it could be practised everywhere else with impunity. The result of his experiments is that a very strong iodine injection into the peritoneum rapidly causes death, but if prepared with a very small quantity of iodine, the requisite proportion of which has been fully ascertained, it only occasions symptoms which are easily removed; and in no case either of the animals who have died from its use, or in those who were killed, has the inflammation manifested any tendency to suppuration. The animals that survived have taken food and drink from the third day, and were convalescent by the tenth. Adhesions have taken place most frequently between the intestines and the other viscera, without any being formed between the latter and the parietes of the abdomen. Glutinous and gelatiniform in the beginning, these adhesions are often found reduced to simple shreds, more and more supple and extensible the greater the distance of time after the injection. Having thus obtained the certitude that with the tincture of iodine introduced into the shut cavities, a merely adhesive and not purulent inflammation is induced, that when infiltrated in the tissues, it does not cause gangrene, that the adhesions which it causes are destroyed by the movements of the organs, and that the shut cavities may be restored after having been destroyed, M. Velpeau has thought himself authorized to apply the tincture of iodine to the treatment of a great number of cases of dropsy.

Desirous, however, of proceeding from the more simple to the more serious forms of the disease, he commenced with the most common form—that of hydrocele, in the treatment of which irritant injections had been already used. From that he tried it in encysted hydrocele, congenital hydrocele, hydrocele of woman, and, finally, in that of herniary sacs, in treating which practitioners did not dare to use the vinous injection. After these primary essays, he proceeded next to attack dropsies of the subcutaneous bursæ, and he thus used the tincture of iodine in the bursæ on the dorsum of the foot, around the ankles, in front of the patella, at the back of the knee-joint, in the popliteal space, in front of the head of the tibia, and even in the body of the thigh.

It being requisite, in order to obtain a cure of certain dropsies, to induce an attack of adhesive inflammation, but fearing the occurrence of suppuration, it became necessary to seek for a substance which should always excite the one without any fear of causing the other. A certain number or means of this kind were already used in practice, as regarded hydrocele. Wine, which has hitherto been found the most efficacious, succeeds very well, but, among others, it has

the serious inconvenience of causing gangrenous inflammation when it is infiltrated in the tissues. The fear of a similar consequence has naturally prevented surgeons from employing the vinous injection in other regions, or in larger serous cavities than that of the scrotum. M. Velpeau believes that the tincture of iodine diluted with water is a more appropriate application. Introduced through a puncture into the shut sacs, this liquid causes almost constantly the adhesion of the opposite parietes of the cavity which it touches. Infiltrated into the cellular tissue, it does not cause gangrene; of this fact M. Velpeau is assured by the result of numerous experiments; he has injected it under the skin and between the muscles of several animals—dogs and rabbits, for instance—and in no case did either serous inflammation or gangrene arise. At the end of four or five days there did not exist the slightest trace of pain in the part where the infiltration took place. As he has observed the same thing in man, after certain operations for hydrocele, he has no hesitation in saying that the tincture of iodine, diluted with a sufficient quantity of water, does not give rise to gangrenous inflammations when it is infiltrated into the tissues. Hygroma, nodus, and the hydatidiform tumours of the wrist, have been attacked in the same manner, and in no case has the injection produced serious consequences. Ganglionic and glandular dropsies, the voluminous cysts in the hollow of the armpit, the supra-clavicular region, the parotid region, and the sub-maxillary region, have yielded to this mode of treatment with more facility, perhaps, than dropsy of the scrotum. Similar tumours developed in the breast have by these means been caused to disappear in a week or two. A more serious malady—one less accessible to ordinary measures—the goitre, is also capable, in certain cases, of being submitted to the same mode of treatment. When the tumour contains a transparent or opaque liquid substance, it yields as readily as ordinary hydrocele to iodine injections. M. Velpeau has thus obtained a cure in six cases.

In all these cases there was no fear of being arrested in the use of irritant injections, either by the inconvenience which might result from the obliteration of a shut sac, or by the danger that might arise from excessive inflammation; the same, however, could not be said of the joints when affected with dropsy. However, having ascertained that the tendons around which the iodine had been injected, readily regained their mobility after the operation, encouraged by the facts already mentioned, and convinced that suppurative inflammation might be avoided, Velpeau applied the same plan of treatment as for hydrocele to certain diseases of the joints. As old, obstinate cases of hydrarthrosis, when combated unavailingly by the ordinary plan of treatment, sometimes terminate in a serious disease requiring the amputation of the limb, M. Velpeau considers the circumstances justified his adopting the operation in question. The experiments of a celebrated surgeon, M. Bonnet, of Lyons, which were carried on at the same time, have been performed on at least twenty patients. Those which Velpeau himself instituted have not produced such a frightful list of symptoms as practitioners have hitherto anticipated. A rather severe pain at the moment of injection, agitation, with insomnia and slight fever, and a moderate inflammatory swelling, lasted for some days; such are the immediate results of the operation. The resolution of the tumour is soon effected, and the movements of the limb, at first impeded, are speedily restored perfect in patients affected with simple hydrarthrosis; so that we are warranted in saying that dropsy of the articulations may be safely treated by iodine injections.

M. Velpeau, in conclusion, inquires if we may hope that certain varieties of spina bifida, of hydro-pericardium, of hydrothorax, and ascites, may also be cured by this plan of treatment? It would be rash, he says, to answer this question in the affirmative, without previous experience and direct observation; but he thinks the facts in his possession and analogy are sufficient to justify new experiments in that direction; and he adds, that iodine injections have succeeded with him equally well in purely liquid hæmatoceles as in hydrocele.—*Med. Times*, from *Bouchardat's Annuaire de Thérapeutique*, for 1844.

46. *Aneurism of Innominata treated by the simultaneous Ligature of the subclavian and right primitive Carotid Arteries.*—M. Rossi has applied simultaneously, ligatures to the subclavian and right primitive carotid arteries for an aneurism of the innominata. The patient lived six days after the operation; and the autopsy showed that the left carotid and right vertebral arteries were obliterated, so that, during the six days the patient lived after the operation, all the blood received by the brain was through the vertebral artery of the left side. —*Gaz. Méd. de Paris*, Jan. 27, 1844, from *Bulletino delle Scienze Mediche*.

47. *Suppuration in the Maxillary Sinus—Evacuation of the matter by means of atmospheric air.*—DR. A. BUCHANAN relates, in the *Lond. & Ed. Monthly Journ. Med. Sci.*, Dec. 1843, a case of suppuration in the maxillary sinus, in which he resorted to a very ingenious mode of evacuating the pus, and which may be usefully employed in other cases of suppuration in bony cavities. A tooth had been extracted, one of the fangs of which communicated with the antrum of Highmore, but the opening was so small that the matter would not flow out, and the patient, refusing to submit to the operation for the removal of the bottom of the maxillary cavity, Dr. B. resorted to the following process:—

“A blow-pipe was procured, having the necessary degree of curvature at its smaller end, and a bladder attached to the other end, which was inflated by the patient. The nozzle of the blow-pipe was then introduced into the orifice in the bottom of the maxillary cavity, when, on compressing the bladder, the air ascended to the top of the antrum, and forced the matter downwards into the mouth. By this means about one ounce and a half of fetid matter was discharged; two ounces were collected, but probably at least half an ounce was saliva. The same operation was repeated morning and evening, and a small quantity of matter obtained for some time after.”

48. *Radical Cure of Hydrocele.*—The following operation for the radical cure of hydrocele is practised and recommended by Dr. W. H. PORTER, the Professor of Surgery to the Royal College of Surgeons, Ireland:—

Dissatisfied with the results of the usual operation practised for the cure of hydrocele by injection, Dr. Porter was induced to make trial of other methods, and, after the experience of several years, has adopted the one the description of which we now proceed to quote. This operation is partly that by incision, the only difference being, that, instead of dividing the tunica vaginalis in the entire extent of the tumour, the incision extends only from an inch to an inch and a half in length, and partly that by the tent. Having first punctured the tumour in order to examine the state of the parts, and satisfy himself that it is a case in which an attempt to cure the disease radically may be safely made, or at least in which such attempt would be justifiable, Dr. Porter allows the sac to fill again. When the disease has reappeared, and the tunica vaginalis is as much distended as it previously had been, Dr. Porter performs the operation in the following manner:—The scrotum being shaved, an incision is made of the length above-mentioned down to the tunica vaginalis, and the part carefully examined to ascertain whether any vessel has been wounded which could possibly furnish a considerable quantity of blood. He then passes a bistoury into the tunica vaginalis at one extremity of the incision, out at the other, and divides it by a rapid withdrawal of the instrument; a tent of rolled lint, moistened with oil, and secured with a ligature, so as to be easily withdrawn, is introduced, and the operation is then completed, the patient being placed in bed. On the succeeding day Dr. Porter generally takes from ten to fourteen ounces of blood from the arm, especially if the scrotum is red and shows a tendency to inflammation. The tent is left to become loose, and drop out of itself, which usually takes place on the third or fourth day, and need not be replaced; but it is desirable to break up any adhesions that may be formed between the lips of the wound, and to introduce the finger occasionally into the cavity of the tunica vaginalis until the sixth, after which it may be treated with light superficial dressing, and the cure is generally perfect in about three weeks.

Dr. Porter informs us that he was at first in the habit of plunging the bistoury at once into the tumour, and completing the incision to the requisite extent, by making it cut its way outwards rapidly and at once. The objections to this method, however, are, that in some instances the fluid becomes extensively infiltrated in the cellular tissue, and in one case he found that considerable hemorrhage from the division of a tolerably-sized vessel in the scrotum took place into the sac, giving rise to severe and troublesome after-consequences.

The operation as now recommended is described to be scarcely more painful than the ordinary puncture by a trochar, and, if carefully performed, free from the possible occurrence of any untoward accident; it is decidedly more exempt than that by injection from inflammation and suppuration of the cavity, with all its unpleasant consequences, and the cure is perfected much more rapidly than by other modes of radical treatment.—*Prov. Med. Journ.*, July 24, from *Dub. Journ. Med. Sci.*

49. *Necrosis in the Long Bones.*—Mr. W. S. OKE, in a paper on this subject, in the *Prov. Med. & Surg. Journ.*, July 24, 1844, remarks:—

"When, from whatever cause, a portion of the internal structure of a bone becomes disorganized, and loses its vitality, a curative process is at once set up by the surrounding sound parts, deep-seated, severe and continued pain is felt in the bone affected, depriving the sufferer of his rest, and making sad havoc with his general health.

"The surgeon examines the limb again and again, searching for some deep-seated abscess, but he finds none. Leeches, fomentations and cataplasms are applied without effecting any mitigation of the pain; and the only remedy which affords some degree of relief is repeated doses of laudanum.

"After a while the periosteum is thickened, and the shaft of the bone becomes sore under pressure, and enlarged by the deposit of new bony matter around the dead or disorganized part. At length a small abscess is felt under the integuments, which makes its way through them, and gives relief to the patient.

"Upon a careful examination the abscess is found to communicate through an opening in the new bone, which is like the perforation of a gimlet, with the cavity in which the sequestrum lies. If the blunt end of a probe be bent at an obtuse angle, and introduced through the perforation, we shall be enabled to ascertain the directions which the cavity takes; and by turning its blunt extremity upwards, supposing the limb to lie horizontally, we shall at once bring it into contact with the bony roof of the cavity, which is, in fact, the internal surface of the new bone.

"We are thus made acquainted with the true state of the case, viz., that disorganization had taken place in a portion of the internal structure of the bone; that suppuration had necessarily followed; and that the new bone, deposited around the dead portion, had been perforated in order first to evacuate the matter, and, secondly, the opening having been gradually enlarged, to allow of the sequestrum being thrown off.

"This is precisely what takes place in the soft parts, when there is loss of vitality in some portion of the subcutaneous cellular tissue. Here we have severe pain, throbbing, redness and thickening of the integuments, and suppuration beneath them, when, as it were, all at once a small opening takes place through the integuments, which discharges a fetid matter, and, gradually along with it, the sloughs of the tissue.

"Necrosis is more frequently met with in children and young persons; and the tibia is most commonly the seat of the disease. The other cylindrical bones are also sometimes similarly involved.

"In the treatment of these cases, the indication clearly is to enlarge the aperture, in order to remove the sequestrum. The sooner this is done the better. We shall be justified in doing it even before any natural opening has been formed, provided we are confident as to the nature and situation of the disease, upon the same principle that we are called upon to cut through aponeurotic texture for the outlet of pus confined beneath it; but if we are not sufficiently certain of our

diagnosis, (and this will generally be our position.) we are to wait till the bone has been naturally perforated—no longer, because, if we permit the disease to go on without enlarging the opening, the bone, from being constantly exposed to the matter accumulated in the cavity, will probably become more extensively disorganized, and the result will be, that instead of being able to remove the disease by one perforation of the trephine, we shall be under the necessity of making several more.

"As soon, then, as a cavity in the internal structure of a bone is discovered, for example, of the tibia, the limb being laid upon a pillow and firmly steadied at the knee and ankle, a conical incision is to be made through the orifice of the abscess down to the bone, and sufficiently long to allow the integuments to be dissected up, and the bone laid bare as far as the disease extends, which can generally be determined by the morbid condition of the periosteum, and by our exploration of the cavity below. If there be more than one aperture in the bone, the dissection is to be continued till the whole of them be fairly exposed.

"Should we find only one, and that leading to a transverse or very limited cavity, the removal of a single circle of bone might be sufficient, which is to be sawed out by a moderately-sized conical trephine, cutting at its side as well as at its extremity; but if the cavity be found to extend longitudinally down the shaft, or if there be several openings, then so many circles are to be sawed out as the extent of the disease shall require. The intervening bridges of bone may be removed by Hey's saw, or, what is better, they may be cut out by a small chisel, and the gentle stroke of a mallet.

"The cavity being freely exposed, the sequestrum, if loose, is to be removed at once; if not, it must be left to be disposed of by the natural process.

"If the cavity consist of carious bone, which will sometimes be the case, the diseased surface of the cavity should be cleared away by a sharp gouge, after the manner recommended by Mr. Hey.

"We shall occasionally find that the cavity contains a sequestrum, extending to a considerable length both above and below the aperture, which, therefore, cannot be extracted through it. Under these circumstances the sequestrum is to be cut across in the open space we have made, which will enable us to draw out first one end, then the other."

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50. *Compound Fracture of the Tibia during pregnancy.*—Mr. HAWKINS, in a report in the *Prov. Med. & Surg. Journ.*, June 5, 1844, of surgical cases occurring in the Cheltenham Hospital, relates one of a compound fracture of the right leg, a little below its middle, in a woman thirty-six years of age, in the eighth month of pregnancy. The accident was occasioned by a sudden twist in getting out of bed. The fracture was very oblique, and nearly an inch of the tibia protruded through the wound. Reduction was, however, effected without difficulty, and the limb placed in a fracture-box. Five weeks from the receipt of the injury the bones had firmly united, and a few days afterwards the patient was delivered of a fine healthy female child.

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51. *Dissecting Aneurism of the Aorta, Innominata and Right Carotid Arteries.* By R. B. TODD, M.D.—A stout, plethoric man, æt. 37, was suddenly seized, while dining at a friend's house, with syncope, from which he soon recovered. His symptoms at this time were, violent pain in the loins, down the course of the ureters, thighs and abdomen, with some tympany and swelling of that region, nausea and scanty urine. Notwithstanding depletion, local and general, purging and diuretics, the kidneys ceased to act, and other signs showed themselves. He became paralytic of the left side: the pulse of the right side was distinctly smaller and weaker than that of the left: there was bellows sound in the course of the aorta and innominata, and the breathing in the right lung was less audible than that of the left. There was also great drowsiness and sluggishness, indicating oppressed brain.

About the fifth or sixth day the secretion of urine returned, but the cerebral symptoms showed but trifling signs of amendment. The pupils, which had

before been unequal, became equal, and some power returned to the paralyzed side; but the pulse began to falter, and signs of an internal hemorrhage manifested themselves, and on the eleventh day from his seizure he expired quite suddenly.

A copious effusion of blood was found in the pericardium; this had escaped through a little fissure in the outer coat of the aorta, which formed the external ovule of a recently formed aneurismal sac. This sac communicated with the aorta through a transverse rent in its inner and middle coats, which originated in an ulcerated ætheromatous spot. The blood which thus escaped from the artery made a new channel for itself along the aorta, and also along the innominate and right carotid arteries, by splitting the middle tunic of those vessels into two laminae. The separation took place in the carotid, to some distance up the artery, and was then stopped, the consequence of which was the plugging up of that artery, and the cessation of the circulation in it.

The right hemisphere of the brain was exsanguineous, and all that part of it which is above the fissure of Sylvius (which is supplied with blood by the middle cerebral artery) exhibited numerous patches of softening without discoloration, affecting the white matter as well as the gray substance of many of the convolutions. This softening Dr. Todd attributed to the stoppage of the circulation in the right carotid artery, the vertebral not being able to render its full share of blood, owing to the diminished calibre of the innominate and subclavian. The kidneys were in the second stage of granular disease. The temporary cessation of the action of these organs was doubtless due to a temporary impediment to the full flow of blood to them. The paralysis and the somnolency were clearly to be attributed to the physical alteration in the right hemisphere of the brain.—*London Med. Gaz.*, June, 1844.

52. *Crural Hernia successfully operated on after twenty-nine days strangulation.*—This operation was performed by M. STEINBRENNER. The tumour was of a livid red colour, and there had been frequent vomitings, constipation, and gripping pains during the whole period; the debility was extreme. When the loop of intestine was exposed, it appeared of a deep brown-red colour, without a trace of gangrene; and after being freed, was easily reduced. Two hours afterwards the bowels were relieved; the symptoms subsided, and a rapid cure was obtained.—*Journal des Connaissances Médico-Chirurg.*, Oct., 1843.

53. *Contributions to the statistics of Tracheotomy.*—Dr. JAMES WATSON, physician to the Glasgow Royal Infirmary, relates, in the *Lond. and Ed. Monthly Journal of Medical Science*, three cases which recently occurred in the clinical wards under his charge, in which tracheotomy was performed. The propriety of this operation seems to be doubted by so many surgeons that it is extremely desirable to collect its actual results, as it is on such evidence only that this incision can or should be removed.

The cases in question were three; in two of them the operation was perfectly successful, in the third the patient died. The patients were all adults, and their symptoms remarkably similar. Their disease was somewhat of the character of chronic laryngitis, but connected with syphilitic sore throat, and partaking latterly of a more acute character, involving the immediate safety of the patients, probably in consequence of cold. This complication with syphilis, affording the hope that much of the chronic constriction of the glottis might be occasioned and kept up by irritation extending from the ulcerated fauces without seriously implicating the respiratory apparatus farther down, was supposed to hold out a reasonable prospect of the operation not only prolonging the patient's life for a few days, but even of contributing towards the final and complete restoration of health.

In the fatal case Dr. Watson regrets that the operation had not been performed earlier. "Had this been done," he observes, "I have no doubt, from the state of the trachea, and even of the lungs, that the issue would have been equally successful as in the other two. The trachea was sound; and the con-

gested state of the lungs would in every likelihood have been got rid of, when the obstruction to the ready admission of the air was removed."

Dr. Watson concludes his paper with the following remarks:—

"1st. That it is important practitioners should bear in mind that, in syphilitic sore throat, the upper part of the larynx is apt to become the seat of disease as well as the fauces; and that hence the most grave consequences to the patient are to be dreaded. The progress towards such a state is generally slow, but may at any time be developed or accelerated by cold. A watchful care, therefore, ought to be exercised over patients whilst in this hazardous position; and if such an extension of the disease should take place, so as materially to impede respiration, thus placing the patient's life in danger, and speedy benefit be not derived from more ordinary curative means, the trachea ought to be opened, in the full assurance that, if done before the powers of life are not too far exhausted, a successful issue may be counted on.

"2dly. That even where, from neglect, or the opposition of the patient, the operation may have been imprudently delayed, we must not be too readily deterred from operating, by suspicions as to the state of the lungs, or the strength of the patient. In so far as the above cases go we are warranted in operating, even although appearances should be very unfavourable. In all of them, the dyspnoea had been great for weeks,—the threatening of suffocation for the last few days had been extreme,—and in two, the pulse was very quick, and the debility alarming. Yet two out of the three recovered without any bad symptoms, and in the third, the autopsy, as already remarked, discovered nothing to forbid the operation.

"3dly. In these and similar cases, it is unquestionably a most important circumstance, in reference to the propriety of operating, that the affection of the glottis is the consequence of an irritation descending from above. This circumstance places a clear line of demarcation, in point of prognosis, between such a class of ailments and those others in which occlusion of the rima glottidis is either subsequent to, or nearly simultaneous with, diseased states of the trachea and bronchi, as is not unfrequently, if not always, the state of matters in the ordinary chronic laryngitis of adults, and the acute laryngitis of young subjects, usually called croup. In such cases, the same success is not to be anticipated from bronchotomy. In ordinary chronic laryngitis, life, perhaps, may be prolonged, by the operation, for a few days or weeks, but this disease seldom exists without incurable derangements of the bronchi and lungs accompanying, if not preceding, and altogether irrespective, in their origin and progress, of the constriction of the glottis. And as there can be no change of circumstances effected by the operation calculated to arrest or remove states not dependent on such constriction, so it must happen that surgical interference can do nothing more than very triflingly postpone, if by its shock it do not actually hurry, the otherwise inevitable fate of the patient.

"Neither can I see any thing in bronchotomy calculated to benefit the patient in common croup. This is not a disease of the rima glottidis merely, but when at all severe, nearly simultaneously of the trachea and bronchi to their minutest ramifications. No doubt, from the smallness of the rima, and, indeed, of the whole trachea in children, the suffocative symptoms are the most striking, but the disease would be quite competent to kill, if we could suppose such a case, although the rima were not at all obstructed, from the immense extent of the inflammatory irritation, and the barrier presented by the false membrane to the due oxygenation of the blood. And although convalescence in some cases is connected with the expulsion of this false membrane, yet this event is rather the consequence of a return of the bronchial surface to a healthy state than a cause. The powers of the constitution or judicious treatment may have affected this amelioration; and whether the operation were performed or not, the issue would have been the same. The membrane, if disengaged from the bronchial surface, would be easily expelled; if not disengaged, the operation could do nothing towards facilitating this expulsion, and even little towards admitting the air into the bronchi, at least so as to act beneficially on the system. I am afraid, in

most cases of this description, I would almost say in all, the operation can only add a frightful and most annoying aggravation to the suffering of the little patients. I have now been party to three or four operations in cases of common chronic laryngitis and croup. The patients all died, and I am persuaded that it would be well were the profession to repudiate bronchotomy in these diseases, especially in the latter. Its being mooted at all as a possible means of giving relief, places the whole parties concerned in a most unpleasant attitude, viz., of hesitation between a desire to leave nothing undone, and a resorting, on the merest chance of benefit, to an operation which, in nineteen cases out of twenty, will do harm, by increasing the bronchial irritation,—not in one case in a hundred will it ever do good, and the want of success in such unsuitable cases, prevents its adoption in others where the probability of its being of use might be greater.

"4thly. Were I making an exception to the above general rule, it would be in respect of laryngitis in young subjects, consequent on diphtheritic affections of the fauces, and in scarlatina anginosa. I look upon such cases as in some respects resembling those which are the subject of our present remarks, more especially in the important particular of the glottis being affected in consequence of an extension of the disease from above, and the probability being great that the affection of that part, although sufficiently severe to implicate the immediate safety of the patient, might not be accompanied by an equal amount of disease in the trachea or bronchi:—thus differing from common croup, where, in urgent cases, the whole lining membrane of the larynx, trachea and bronchi, is nearly simultaneously and equally affected. I only recollect one case, however, in which this operation was performed in such circumstances. It occurred to me, so long ago as June, 1821, but, though the interesting nature of the case was sufficient to impress its circumstances deeply on my recollection,—its having been the occasion of suggesting to my mind a mode of treatment, in such diseases, which has since, in my own hands and in those of many others, done much good, has contributed to fix it still more deeply. It was a fine boy of about eleven or twelve years of age. He had this diphtheritic affection of the fauces, and it spread to the glottis. The distress was so great that tracheotomy was performed. He was greatly relieved by the operation, and lived after it ten days, when he died very unexpectedly, after giving good hope of a complete recovery. Erysipelas seized the wound and its neighbourhood, from which he almost immediately sank. On reflecting on this case, after the patient's death, it struck me that caustic applied to the diphtheritic spots on their first appearance, might have cured them, or checked the tendency of the diseased state of the mucous lining of the fauces to spread, and as the solid caustic would have been inconvenient, from the irregularity of the surface to which it required to be applied, I naturally concluded that this would have been easily effected by dissolving the caustic and applying it by means of a small brush. So far as I know, this was the first time this simple and obvious remedy was thought of in such cases. I henceforth used it myself wherever it was indicated, and recommended it to all my medical friends. Since then it has come into common use, and I believe has cut short many such affections, and by preventing extension to the larynx, removed the necessity of having recourse to tracheotomy. Where, however, such an extension does occur as I have already mentioned, I think this operation holds out much hope, not only of warding off immediate dissolution, but of contributing to an ultimate cure. The inflamed glottis is allowed to rest from the forcible attempts to respire through an insufficient aperture,—the system is delivered from the depreciation of all its functions, caused by imperfect aeration of the blood,—time is allowed for the application of suitable remedies to the mucous lining of the fauces, and judging from analogy, any existing affection of the lungs, being only consequent on the disturbed state of the parts above, is likely to subside with the removal of the exciting cause, the patient's restoration to health becoming highly probable.

"5thly and lastly. The rapidity of the convalescence of the successful cases deserves notice. In a month, Esplin was dismissed cured; and Mary Campbell,

although the removal of the tube would have been imprudent, could breathe and speak tolerably by the glottis, and the ulcerations of the tonsils and soft palate were cicatrized. Yet in both these cases the affection of the throat was of six months' duration, the ulceration extensive, and the occlusion of the glottis extreme. No doubt this rapid restoration, for it was too rapid to be the result of the medical treatment, was greatly owing to the parts being relieved from the incessant coughing, straining for breath, and retching to clear the glottis from obstructing mucus, incident to the state of the patients before the operation; but also, and I have no question, mainly in regard of the ulcerations, from the constitution being delivered from the pernicious effects of the state of slow asphyxia to which these individuals were subjected from these unfortunate circumstances."

54. *Danger of allowing a Catheter to remain for a long time in the Bladder.*—Scarcely a year passed that Dupuytren had not occasion to exhibit to his numerous pupils one or two examples of perforation of the bladder and fatal effusion of urine, resulting from a gum-elastic catheter allowed to remain permanently in that organ. Dr. Rognetta has twice witnessed the autopsies on such occasions. If the catheter is too long, or introduced too far, or certain dynamic conditions exist in the tissues of the organs, the beak of the instrument presses on the posterior parietes of the bladder, an eschar is produced, followed by an opening through which the urine flows into the peritoneal cavity.—*Annales de Thérapeutique*, July, 1843.

55. *On Lithotomy.* By B. B. COOPER.—Almost every surgeon of repute has some peculiar mode of his own for the removal of a calculus from the bladder. The organ has been attacked at all approachable points, and by every variety of instruments, from the most simple to the most complex. It signifies but little what kind of instruments are used, providing they are directed by the hand of a skilful anatomist, who possesses judgment sufficient to enable him to vary his steps according to the nature of the difficulties which may exist in any case. After considerable experience, I can express my preference to the straight staff, but it must be in the hands of one who understands how to benefit by the advantages it affords.

The steps of the operation of lithotomy may be divided into four:—1st. To lay open the perineum; 2d. To lay open the pelvis; 3d. To lay open the bladder; 4th, To extract a stone.

In the first of these steps, if the straight staff be used, it must be recollected that it cannot be brought to a right angle with an horizontal line, as the curved instrument can, but only to the angle of 45°, beyond which it should not be attempted to be raised, as its point is liable to be drawn out of the bladder. Nothing untoward can occur during the performance of this step, unless from an unusual size of the superficial perineal artery or one of its branches, which may be required to be secured with a ligature. The principal point to be observed in the second step, is the opening the urethra at its membranous part, avoiding, as much as possible, the bulb and its large artery. It is in this incision the surgeon may wound the rectum, but which may be always avoided by the oblique direction of the incision towards the tuberosity of the ischium, as well as by the precaution of having the bowel perfectly emptied of its contents. Notwithstanding every precaution, the artery of the bulb is sometimes wounded, and is not easily secured, on account of its death and tendency to retract. Mr. Travers in such a case arrested the hemorrhage by making a piece of cork press on the internal pudic artery over the spinous process of the ischium. In this step, the depth of the parts appears much greater when the straight staff is preferred to the curved; but this apparent difficulty is really an advantage, as the artery is not so much pressed forward in the way of the knife.

The parts divided in the third section consist of the urethra, prostate gland, and the fibres of Wilson's muscle on the left side. The principal point to be attended to in this step is, not completely to divide the left lobe of the prostate

gland, for if its fascial covering be cut through, urine is sure to escape into the cavity of the pelvis, which is the most frequent cause of death after lithotomy.

The fourth step of the operation is the introduction of the forceps, and the removal of the stone; in effecting this object, numerous difficulties may present themselves, from the position, size, form and composition of the stone,—each of which can only be overcome by the surgeon's judgment and *tact*. The great source of danger, in this operation, arises from too free an incision through the prostate gland, giving rise to extravasation of urine into the cavity of the pelvis; the propriety, therefore, of making a small opening with the knife or any other cutting instrument, through the prostate, is very manifest. When the surgeon has cause to suspect that the stone is too large to be removed by the incision of the lateral operation, he should be prepared with instruments to break it into two or three pieces, so that he may not be under the painful necessity of submitting his patient to the objectionable operation, *à deux temps*.

The operation of lithotomy sometimes requires to be repeated, although every caution has been exercised to ensure the removal of all trace of the first calculus. The late Sir A. Cooper more than once operated a second, if not a third time. I have myself performed the operation three times on the same individual, in a period somewhat short of four years; he is still alive, and has been free of any complaint since the date of the last operation, (a period of twelve years.) Some lithotomists think that the incision should be made on the right side of the perineum in second operations, but this I consider to be both unnecessary and inconvenient.

Patients should not be kept on very spare diet after the operation; it must never be forgotten that the constitutional vigour cannot be diminished without increasing the irritability of the system. I am quite sure that one of the greatest modern improvements in the treatment of patients who have undergone surgical operations, is with respect to the better diet which is early prescribed; and hence, I believe, the greater comparative success of operations in this beyond that of any other country.—*Guy's Hospital Reports*, Oct., 1843.

56. *Fibrous Tumours of the Mammæ*.—In the early part of last January, M. CRUVEILHIER read before the French Academy of Medicine, a memoir on fibrous tumours of the mammæ, which contained views so contrary to the current opinions of the day, as to have given rise to a very warm and lengthened discussion, in which the most distinguished members of the above-named learned body took part. We take from a late number of the *Lancet*, the following translation of the report of the memoir and of the debate.

M. Cruveilhier commenced by stating that in the memoir which he was about to read, he should endeavour to prove that the breasts were very frequently the seat of fibrous tumours, although their existence in this region was not noticed by Sir Astley Cooper or by Beyer, in their treatises on the diseases of the mammæ; that these fibrous tumours never degenerated; and that, being a purely local affection, they did not form again when once extirpated, so that their extirpation was not *necessarily* indicated.

Fibrous bodies, says M. Cruveilhier, were confounded with various other abnormal organic productions, under the names of scirrhus, cancers, polypti, until the researches in pathological anatomy were made which signalize the commencement of this century. Fibrous bodies of the uterus were first accurately described by Bayle, but he fell into the error of considering fibrous growths as confined to the uterus. Fibrous tumours may be formed in two ways; they may either spring from membranous surface, such as the periosteum of the nasal fossæ, or they may originate in the centre of an organ, such as the uterus, the mammæ, the ovaries, or the testicles.

Fibrous bodies are generally spheroidal; their surface is sometimes regular, sometimes mamillary or lobulated. Their volume is variable. With the exception of those which rise from a membranous surface, they only adhere to the tissues in the midst of which they develop themselves by loose cellular tissue, so that they are easily enucleated. The density of the tissue of which they are

formed is very great, indeed, it is nearly of a cartilaginous texture, being composed of albugineous particles linearly disposed, strongly pressed against one another, interwoven in various directions, and often divided into several groups in such a manner as to constitute distinct lobuli. These fibrous formations possess veins, which originate in their centre by very small veinules, the trunks creeping on the service. No arterial vessel, no lymphatic or nerve, can be traced in their proper tissue. Fibrous bodies, therefore, present no other organic element than fibrous tissue animated by veins. Their life is thus reduced to obscure nutrition, the agent of which is venous blood agitated by an oscillatory motion necessarily very slight.

From the first period of their existence, fibrous tumours offer the characters which they will offer when fully developed. A fibrous tumour of the size of a cherry presents the same density of structure that we observe in one of the size of the fist or of the head. Sometimes these tumours are of a cartilaginous or osseous character from their origin.

Fibrous bodies only inconvenience by their volume and their weight; they are inoffensive parasites, which merely slightly modify the circulation and nutrition of the surrounding tissues. They are not themselves susceptible of many consecutive changes. They may increase indefinitely, remain stationary, or even undergo a kind of atrophy. They may become crusted with or penetrated by calcareous matter; they may also become the seat of œdema, in which case the tumour is often penetrated by a fluid resembling synovia; but they are incapable of cancerous degeneration; indeed, there is incompatibility between fibrous productions and cancerous degeneration.

Such are, according to M. Cruveilhier, the general characters of fibrous formations. Do they apply to some of the organic productions which are observed in the mammæ? M. Cruveilhier believes that they do, founding his views on a number of cases of clinical observation and on some facts of pathological anatomy.

The mammary gland presents, continues M. Cruveilhier, a structure which is highly favourable to the development of fibrous tumours, being composed of adipose tissue, of granulations, and of cellular and fibrous tissue. The fibrous bodies of the mammæ present themselves under the form of small spheroidal tumours, of a volume which varies from that of a millet-seed to that of a fowl's egg, or above. Their surface is sometimes smooth, sometimes mamillary; their hardness is extreme, occasionally like that of a stone. These tumours are generally subcutaneous, but may develop themselves in the interior of the mammary gland; they are exactly circumscribed, quite distinct from the tissue of the gland, to which they only adhere by loose cellular tissue. They offer the mobility of a lymphatic ganglion, and roll, as it were, under the fingers, whence the popular term of *glans*.

Thus the characteristic features of fibrous bodies of the mammæ are,—spheroidal shape, perfect circumscription, mobility, and independence of the tissue of the organ in which they appear.

Fibrous tumours of the mammæ not having been yet distinguished, either clinically or anatomically, from other tumours of the breast, and more especially from cancerous tumours, they are treated in the same manner as these latter lesions, by extirpation. It is generally asserted that the tumours, vulgarly called glands, may exist for a greater or less length of time without degenerating, but that when women reach the age of forty-five or fifty they then, nearly always, increase rapidly, infect first the adjoining tissues and then the entire economy, presenting all the characters of incurable cancer. The result of such ideas is, that the extirpation of the tumour is nearly always proposed, and accepted as soon as the terrible word cancer is pronounced.

M. Cruveilhier states that the first doubts as to the nature of these tumours arose in his mind about fifteen years ago, owing to his having met with several of these indolent rolling mamillary tumours in one or both breasts, in young girls scarcely arrived at the age of puberty, and in young women full of health and vigour. It then struck him as strange that tumours such as these, generally accidentally discovered, should be cancers in the first stage. His doubts became

still more confirmed from the circumstance of the tumours of several of these females, who had refused to submit to any operation, not undergoing any increase in size, and not degenerating, although some had had children and suckled, and others had passed the critical period of life, and also from the circumstance of several of his patients in whom such tumours had been extirpated not having had any return of the morbid growth.

Having examined a great many mammary tumours extirpated by various surgeons as cancerous, he had found that a certain number presented all the anatomical characters of fibrous bodies above described, and not those of cancer. Whilst thus studying the anatomical characters of tumours of the mammaræ he had met with a remarkable pathological disposition. He had found that a certain proportion of these fibrous bodies, instead of being full, as they at first appeared to be, were hollow, and sometimes contained a viscous synovial kind of fluid. He had several times found mammary fibrous tumours, which had rapidly attained a large size, and which, on that account, had been extirpated, saturated with a viscous fluid, exactly like uterine fibrous formations.

M. Cruveilhier ended by relating the following case:—Fifteen years ago, a lady, forty years of age, consulted him about several tumours which she had had in the breasts since the age of puberty. Her general health was good, and her complexion fresh and healthy. There were three tumours in the left breast, of which two were as large as hen's eggs, and one in the right as large as a turkey's egg. These tumours were perfectly distinct, of a stony hardness, lobulated on their surface, rolling underneath the skin, and perfectly independent of the mammary gland. For some time the *embonpoint* of the patient had been increasing, and she fancied that the tumours had likewise increased in size. She had been advised to submit to an operation. Looking upon these formations as of a fibrous growth, M. Cruveilhier told her not to pay any attention to them, and not to feel uneasy, as they were neither of a cancerous nature nor susceptible of degeneration. Unfortunately she did not follow this advice, but consulted a practitioner, who fancied that by the application of leeches, the use of baths, and very low diet, he could bring about the resolution of the tumours. After undergoing this treatment for eight months, this lady, who had become excessively debilitated, was seized with erratic erysipelas, which, after running over the entire surface of the body, fixed itself on the right mammaræ, and gave rise to a phlegmonous abscess, under the influence of which she sunk exhausted.

At the post-mortem examination all the internal organs were found healthy. The mammary tumours, as movable as when M. Cruveilhier first examined them, were only found to adhere to the gland by loose cellular tissue, and were enucleated with ease. The texture of these tumours was extremely dense, and presented none of the characters of cancerous tissue. The strongest pressure did not give rise to any oozing of fluid or of cancerous substance. Dissection showed that the tumours were formed by a multitude of granulations firmly pressed one against the other, sometimes adhering, sometimes free.

M. Blandin opened the discussion by stating that the memoir which M. Cruveilhier had read before the academy deserved serious attention and discussion, inasmuch as the treatment of tumours of the breast at present resorted to by surgeons, must be completely modified were the profession to accept his ideas, which may be thus resumed:—*That fibrous tumours were very frequent in the mammary region; that they never degenerated into cancer; that they may be diagnosed with certainty; and lastly, that they ought not to be extirpated.*

He did not believe, for his own part, that fibrous tumours were common in the mammary region; a number of tumours thus termed by some surgeons were merely cancers in a state of crudity, scirrhus more especially presenting this fibrous hardness in the first period of its formation. He differed also from M. Cruveilhier in his anatomical premises. He did not think that the breast contained naturally much fibrous tissue; it contained considerable masses of condensed cellular tissue, but no truly fibrous tissue. M. Cruveilhier also stated, as a proof of the fibrous nature of these tumours, that they did not return when extirpated; but that was admitting that really cancerous tumours always did

reappear under such circumstances, a doctrine which he was not prepared at all to admit, which, indeed, he repudiated with all his might. As to fibrous tumours not degenerating, such an opinion was contrary to reason and contrary to facts. Normal fibrous tissue degenerated, as was proved every day by the fungous growths of the periosteum and of the dura mater, and why should not accidental fibrous formations? Moreover, he had seen fibrous tumours of the uterus which had undergone a true cancerous degeneration, and similar instances had been mentioned by Dupuytren at his clinique. He admitted, however, that such degeneration was exceptional, and that fibrous growths generally remained stationary, or merely underwent a petrous transformation.

He did not think either that it was possible to diagnose during life fibrous bodies of the mammæ from other tumours, as M. Cruveilhier asserted. The characters which he had assigned to them also belonged to encysted cancerous tumours. This being the case, how was it possible to distinguish one from the other, the more so as both might be extirpated without much chance of reproduction. He believed that the distinction was only possible with the assistance of the scalpel, but such a posthumous diagnosis is of but little use towards solving the question which was then being discussed.

Not believing in the possibility of an accurate diagnosis, and admitting the possibility of the degeneration of fibrous bodies themselves, he could not agree with M. Cruveilhier as to the impropriety of extirpating the tumours which he had described. Encysted cancerous tumours might, like fibrous tumours, remain for years indolent, but if not destroyed they became at last painful, increased with rapidity, and infected the economy. He had operated for a large encysted cephaloid tumour of the breast which had remained small, indolent and stationary for twenty years. He thought that extirpation ought to be the rule, and the expectant system the exception, and that the reason why now operations for these forms of cancers were scarcely ever successful, was because the operation was generally deferred too long. He was afraid that the opinions of M. Cruveilhier would do much mischief if they were adopted by practitioners generally. Finally, he believed that fibrous tumours of the mammæ were very rare, especially if compared with other tumours of the same region; that they were susceptible of cancerous degeneration, although such a termination seldom occurs; that they could not be accurately diagnosed, and that consequently they ought to be extirpated as well as encysted cancers, with which they had the greatest symptomatic analogy.

M. Rochoux regretted that M. Cruveilhier had not examined more attentively the structure of the different tumours of the breast. In the present state of science examination with the naked eye was insufficient; recourse must be had to the microscope. With its assistance the organization of these tumours might have been more efficiently analyzed. He himself had studied fibrous texture with the microscope, and had found it extremely difficult to distinguish natural fibrous tissue from cellular tissue. Nothing could be more confused than accidental fibrous tissue; the fibres were so interwoven that it was impossible to follow them.

M. Gerdy thought that in some cases fibrous tumours of the breast might be diagnosed, but the diagnosis was always difficult. The surface of cancerous tumours, when compression is used, becomes covered with slight depressions, owing to an alteration of the cellular tissue. As the disease advances the nipple is drawn inwards, and the tumour is the seat of lancinating pains. Sometimes, however, the anatomical characters above enumerated exist without there being any pain. In all these cases an operation should be resorted to. Operations performed on the breast ought not to be considered as very serious; they were much less so than amputations of the limbs, which always presuppose deep-seated alterations of the osseous system. If a mammary tumour presented none of the above symptoms; if it was movable, indolent, and did not increase in size, he did not think it necessary to operate. He knew an unmarried lady who had borne, for twenty years, a benign tumour of this kind which had never progressed.

M. Velpeau agreed in some respects with M. Cruveilhier. It was an undeniable fact that there were non-cancerous tumours of the breast, and that many of these were fibrous, but he did not think that all those which M. Cruveilhier had described as fibrous were really such. There was a peculiar kind of tumour which he had called *fibrinous*, and which was formed by the organization of blood, or any other fluid which might have been extravasated in the mammary subsequently to a blow, to a contusion, or during menstruation, &c. M. Cruveilhier appeared to have comprised these tumours among his fibrous formations. He was led to believe that this was the case because they were very frequent, and differed in all their characters from cancerous tumours; but they also differed from fibrous tumours. He thought that there was a distinction to be established between fibrinous tumours on the one side, fibrous tumours on the other, and the four forms of malignant growths recognized by Laennec, by Bayle, and since that by all anatomo-pathologists, viz., encephaloid, scirrhus, melanoid, and colloid growths. All these forms of tumours were notably different one from the other. The individual characters were not sufficiently distinct to enable us always to distinguish them during life; but they were extremely easy to recognize by their microscopic peculiarities. The most recent microscopic researches, more especially those of MM. Vogel, Müller and Mandl, had much contributed to enlighten the pathological anatomy of these tumours. Their characteristics might be reduced to this: in fibrous tumours the microscope only shows fibres and fibrilli. In the four forms of cancerous tumours which he had mentioned, there were cells, globules united so as to form alveoli. There was, therefore, a fundamental difference in the primitive and intimate organization of these tumours; moreover, the former were not susceptible of degeneration, whereas the latter always degenerated. In this he agreed with M. Cruveilhier. Can, however, these different forms of tumours be recognized in the living subject? In well-marked cases he thought it possible, but in many circumstances nothing could be more difficult. The globular shape and isolated state which M. Cruveilhier had given as distinctive characters were sometimes observed in colloid and encephaloid tumours. If, however, tumours presenting these characteristics were observed in young women, there was every reason to suppose that they were fibrous or fibrinous, and not cancerous, cancerous formations, as every one knows, not often developing themselves in young women.

In the course of the discussion it had been stated that fibrous tumours were capable of degenerating, and that there had been cases of fibrous bodies of the uterus which had thus degenerated. Now, he did not know of any one well-authenticated case of such a transformation. Either the tumours which had degenerated were not fibrous, or the degeneration was not of a cancerous nature. All tumours had their peculiar characters; they constituted distinct *individualities* which were not transformable one into the other. They had not the same characters, the same progress, the same termination. He did not mean to say that the degeneration of fibrous tumours was altogether impossible, because it was impossible to limit the operations of the human organization; but he must say that if degeneration under such circumstances had ever taken place, it must be looked upon as quite an exception.

M. Cruveilhier did not appear to have sufficiently considered the question of treatment, when he stated that these tumours were not to be extirpated if recognized. Although thus condemning the operation, he proposed no other means of cure. It would have been better had he endeavoured to arrive at some practical result on this point. As to the really cancerous tumours, there was but one plan of treatment, and that was extirpation. There were many cases on record of cancerous tumours cured by other means, but he did not believe that there was one really authenticated instance of such a cure in the annals of science. There was great difference of opinion between surgeons and physicians with respect to the propriety of operating for cancer. He believed there was exaggeration on both sides. There could be no doubt that the operation was sometimes successful. He himself had amputated, eight years ago, the breast of a lady who had borne an enormous ulcerated encephaloid tumour of the breast for several

years. There had not been since then the slightest relapse, and the health of the patient was perfect. This case alone would suffice to decide the question. Cancer left to itself was necessarily a fatal disease; the operation was sometimes successful; therefore it must be performed, and that as early as possible, before it had acquired great development, and had infected the economy. M. Velpeau concluded by thus resuming his opinions on the subject:—

There are fibrous tumours of the breast which do not endanger the life of patients, and which are not liable to degenerate. But, as generally speaking, we are doubtful as to the true nature of such tumours, as their presence is a perpetual source of anxiety and torment to the females who are affected with them, as the operation by which they are extirpated is nearly always an “innocent” one, there is no reason why we should hesitate to extirpate them.

M. Cruveilhier replied, that he congratulated himself on having originated the discussion, as through it a most important fact had been established, viz., that there existed fibrous tumours of the *mammæ*. Henceforth, whenever a diagnosis of a tumour of the breast had to be made, it would be necessary to take into consideration the possible existence of a fibrous growth. He was sorry, however, to find that he differed with his colleagues on most other points. He thought these tumours of frequent occurrence. M. Blandin thought them very rare. He thought it generally possible to distinguish them from other tumours; this was denied. He could only answer that on these points he formerly entertained the opinions which had been emitted during the discussion; he should then have said, with M. Blandin, that fibrous tumours were rare, difficult, if not impossible to diagnose, and could degenerate. But for the last fifteen or twenty years his attention had been particularly directed to the study of this question, and he had finally arrived at the conclusions contained in his memoir.

It had been said that fibrous tumours were merely the germs of cancers. During the eight years that he was physician to the Salpêtrière,\* he had met with fibrous tumours of the breast in women eighty years of age, nearly all of whom had borne them since their youth. If they were cancerous germs they were rather old ones. He believed that in pathology there were laws of coincidence and laws of exclusion, with reference to certain diseases. Such an exclusion existed between fibrous and cancerous tumours. He had never seen at the Salpêtrière cancer supervening in old women who presented fibrous tumours of the uterus. This law of the incompatibility of the two diseases had appeared to him so universal, at least for the uterus, that he had felt authorized in telling persons who came to consult him for fibrous tumours of that organ, that they never could have cancer. He admitted, with MM. Rochoux and Velpeau, that the microscope was calculated to throw additional light on the subject, and was sorry that his leisure had not allowed him to have recourse to that source of information. As to the difficulties of the diagnosis, he did not attempt to deny them. However much the art of diagnosing tumours of the breast was improved, there would always be doubtful cases, and in such cases he agreed with MM. Gerdy and Velpeau that it was expedient to operate. He would say the same of tumours of this nature which proved a continual source of uneasiness and anxiety to the women who presented them. He believed with M. Velpeau that extirpation was the only real mode of cure.

M. Moreau had seen cases analogons to those mentioned by M. Cruveilhier, and he considered that the discussion had established the fact that there were fibrous tumours to be found in the *mammæ*. He thought that when there was reason to doubt the nature of a tumour of the breast it was better to wait than to operate. It had been said that the excision of these tumours was an innocent

\* The Salpêtrière is a colossal hospital or asylum situated on the outskirts of Paris, the population of which is nearly 6000. It is devoted to the pauper female insane, of whom there are 1500; to women affected with incurable complaints, or more than seventy years of age, of whom there are above 3000; and to epileptic and idiotic females drafted from other charitable institutions, or belonging to the department of the Seine.

operation. He did not think so; the slightest operation, as every one knows, might give rise to the most serious accidents.

M. Roux said that he also was of opinion that it would be unfortunate if the ideas of his honourable colleague made many partisans. Indeed, he should have been better pleased had they not gone farther than the assembly in which he spoke, as, were they generally adopted, many women would infallibly fall victims to organic diseases of the *mammæ* who otherwise might have had some chance of being saved.

An organic lesion common in its manifestation to several organs, or to the same tissue in several parts of the body, did not, however, show itself in all these organs entirely with the same characters. Thus, the fibrous bodies of the uterus, the fibrous polypi of the nasal fossæ, the fibrous tumours of the bones of the limbs, the funguses of the *dura mater*, differed one from the other. There were certain tumours of the *mammæ* which M. Cruveilhier had called fibrous, and, perhaps, according to this view, consistently, but they were very different from the fibrous bodies of the uterus.

That the breast was often the seat of non-malignant tumours had long been known, and in this respect surgery was more advanced than M. Cruveilhier supposed. These benign tumours, as they were sometimes called, had been more especially described by Sir Astley Cooper and by Mr. Travers. They were generally encysted, indolent, movable, such as M. Cruveilhier had described, and were of various kinds. There were hydatid tumours, there were tumours of a very painful nature, small, of a dense, homogeneous tissue, and of a grayish-white colour; tumours similar to the engorged lymphatic ganglions of scrofulous subjects; others difficult to describe, which had been called scrofulous tumours by English surgeons; there were simple engorgements of the mammary gland, termed by Abernethy "*mammary tumours*." It was all these forms of induration which M. Cruveilhier had united under the head of fibrous tumours. He saw no harm in their being thus termed, provided it were well understood that they were not all identical, and they were not of a similar nature to other fibrous formations, especially to those of the uterus. They did not present the same lamellar texture, and never became, as far as he knew, impregnated with calcareous substance. He did not, however, believe that all these forms of tumour, taken collectively, were often met with. Every year he performed, on an average, from fifteen to twenty operations on the breast, and in the course of his life had most years met with several examples of these kinds of tumours; but for the last three or four years the tumours he had extirpated had all been cancerous formations.

M. Cruveilhier had said that it was easy to recognize with the scalpel the anatomical characters of fibrous tumours on the one hand, and of incipient cancerous growths on the other. This was generally true, but still there were occasionally cases in which the most experienced surgeons remained uncertain, even after the most careful anatomical examination. As to the non-degeneration of fibrous formations, and their incompatibility with cancers, it was a gratuitous hypothesis. What cancer arises in the midst of our tissues in their normal state, and in the midst of fibrous tissues among others, and the possibility of its development in abnormal growths is denied? He thought that whatever was the presumed nature of a tumour of the breast, if it resisted all the various modes of treatment calculated to effect its resolution, it should be at once extirpated.

With regard to the question which had been raised as to the propriety of operating for cancerous tumours, and the chances of cure, his experience and opinions were decidedly in favour of operation. He thought that cancerous affections originated principally under the influence of a general cachexia, or predisposition, but sometimes, also, to a certain extent, owing to a local cause, and in the latter case they were less likely not to return when excised. He had three times extirpated on women voluminous cancers developed on the arm, where issues had long been kept up; in all the cases there was no relapse. In 1831 he was (through a singular coincidence) consulted for well-marked sarcocele by three different persons, on all of whom he excised the diseased testicle.

They were now all three in perfect health. He had even repeatedly seen the excision succeed when performed for a relapse a second or even a third time. In 1819 he amputated the breasts of two ladies for large cancerous tumours. Within the year there was a return of the disease in both instances. He again operated, and the disease never returned. One died seven years after from some acute disease, the other died only three years ago. The most rapid relapses were observed in young patients. He remembered a very striking illustration of this truth. The patient, a young woman, twenty years of age, blooming with health, had in one of her breasts a small, indolent, movable tumour, very similar, indeed, to those described by M. Cruveilhier. It was excised; very shortly afterwards the entire breast became the seat of cancerous degeneration, and she died within five months.

M. Cruveilhier was astonished, to say the least, that it should be asserted that his communication to the academy was calculated to do harm in practice. In his opinion it was not *he* who candidly brought forward the result of his studies and experience, with the view of saving unfortunate females from useless operations, that ought to be blamed, but those who, extirpating all tumours of the breast as cancerous, or as susceptible of becoming cancerous, threw, unnecessarily, consternation into families and into the minds of their patients. In the course of the discussion the existence of fibrous tumours had been admitted by every one, even by M. Roux, although his admission was qualified. The fact, therefore, which his personal experience and dissections had proved to him was admitted as correct. At the same time he did not lay claim to any merit of originality, but merely to that which might accrue from his having forcibly directed the attention of the profession to the existence of these tumours. On consulting Bayle's posthumous treatise on cancer, he had found that Bayle admitted what he calls "fibrous degeneration" as common to all the tissues, and even devotes a chapter to fibrous tumours of the mammæ. He was, therefore, wrong in stating, as he did in his memoir, that Bayle merely recognized uterine fibrous bodies. Moreover, Bayle had known them become cartilaginous or osseous. Sir Astley Cooper had accurately described fibrous bodies of the mammæ under the name of chronic mammary tumour. He admitted that pathological formations, or types, were slightly different in different parts of the body, as was the case with animals or plants in different climates or soils; but the species was invariable and always to be recognized. As to the frequency of fibrous growths in this region, that was a question of observation, and could only be decided by observation. He persisted in looking upon them as very frequent in their occurrence. He thought that what M. Roux had said about the different forms of non-malignant tumours of the breast was very obscure, and did not show that surgeons were as far advanced as he appeared to think in their knowledge of diseases of the mammæ. Taking every thing that had been said into consideration, he did not see any reason for changing his opinions, and persisted in his assertions, viz., that the extirpation of fibrous tumours of the mammæ was not necessary, that it was to a certain extent facultative.

M. Amussat, M. Berard and M. Lisfranc successively addressed the academy, but as their speeches were merely repetitions of the arguments used by MM. Blandin and Roux, we shall not reproduce them. They all agreed that it was difficult, if not impossible, to recognize the real nature of the kind of tumour described by M. Cruveilhier, and thought that such tumours ought to be extirpated if the means of treatment which we possess failed to produce resolution.

57. *Extirpation of the Scapula and a part of the Clavicle.* By M. RIGAUD, Professor of Clinical Surgery in the Medical Faculty of Strasbourg.—A soldier, 51 years of age, had a tumour on the upper part of the left arm for which Professor Rigaud, in 1841, amputated the arm at the shoulder-joint. The wound resulting from the operation healed, and the patient continued in good health for eight months; when an osseous tumour was discovered in the axillary region, arising from the anterior angle of the scapula. M. Rigaud thought it necessary to remove the entire scapula with the external extremity of the clavicle, and this

was performed in the course of the year 1842, with entire success; the patient recovered in two months, and has since enjoyed excellent health.—*Comptes Rendus*, July 15, 1844.

## OPHTHALMOLOGY.

58. *On partial Excision of the Opaque Cornea as a Cure for Blindness.*—M. MALGAIGNE, in the April number of *Le Journal de Chirurgie*, has published a long and learned paper on the subject here announced. It is preliminary to another, wherein he intends to embody the result of his recent experiments and observations; and he seems determined that, on the present occasion, nothing recorded in the history of the science should escape his reflection and criticism. Waiting the result of these original investigations, we shall supply a short analysis of all that appears important in the present communication.

The reading of M. M.'s short note in *L'Académie des Sciences* in March, 1843, was the means of his receiving various communications from several of his colleagues, more especially from MM. Blandin and Sichel. From the former of these gentlemen he learned that a couple of travelling oculists in France have, for fourteen years, been in the habit of performing this operation with varying success; putting forth no claims to invention, but affirming they only follow a practice which was successful before their days.

The author also refers to three memoirs which have since been published on the subject, by M. Rognetta, in *Les Annales de Thérapeutique*, by M. Desmarres in *Les Annales d'Oculistique*, and by Dr. Hamilton in the MONTHLY JOURNAL for March last; in the last two of which the practice, in certain circumstances, is advocated, whilst in the first it is unmercifully condemned.

M. M. ascribes the first notice of this operation, in medical records, to Saint Ives in the year 1722. This eminent man disapproved of the practice for the usual run of opacities of the cornea; but recommended it in those cases where the opacity was due to the sequela of a small-pox pustule.

Dr. Mead is the next author who alludes to the subject, in the few words so often quoted, viz., "he had only once or twice employed the partial excision with success."

There follows next the opinion of the German, Eschschbach, in 1651. A regular practitioner himself, he had opportunities of becoming acquainted with the misdoings of some wandering and unprincipled quacks, who, on two occasions, had undertaken to perform much, and miserably failed. His judgment, then, was decidedly condemnatory.

In France, M. Demours held similar language in 1768, enforcing it by the details of a case in which the opaque cornea had been subjected to innumerable scarifications, which resulted in leaving the opacity worse than it had been before.

In 1779, Professor Gouan, of Montpellier, read to the Royal Society of that city, a case in which the result was the very reverse of the preceding. In 1777 a child aged seven was brought to him, which had lost its right eye when three months old, and when eighteen months, and labouring under small-pox, had been rendered quite blind by an opacity or cicatrice which covered the whole cornea of the left eye. For this the more common remedies—stimulants, irritants, &c., had been long used in vain; and the professor then advised partial excision. For the performance of this operation he engaged the services of M. Pellier, surgeon oculist to the king, who excised about  $\frac{2}{3}$  of the thickness of the diseased membrane. The child showed no indications of pain; cold dressings were applied, and after six days he could distinguish such objects as the fingers, keys, &c. Dr. Gouan subsequently ordered the application of nut oil, under which the vision improved, and, after the lapse of two years, the cure was still considered perfect.

In 1789 M. Pellier gives the result of his more extended experience during

ten years, in these words. "Though I have described this operation for the cure of albugo and nephelium, yet uniform success is not to be expected. Experience has taught me its insufficiency in some cases, and its success in others."

Scarpa was very decidedly opposed to the operation, introduced, he alleges, by the ignorant, and commended by the charlatan. Wenzel was equally severe, remarking that it was likely to produce staphyloma.

In spite, however, of these authorities, Baron Larrey thought that the operation was sometimes worth a trial. In opacities of the cornea, says Larrey, of a certain degree of thickness, the membrane may be thinned down by repeated strokes of a slender bistoury. I performed the operation upon a young lady at Toulon, and thereby removed an old opacity which covered the whole extent of the cornea, and completely interrupted the entrance of the rays of light. The transparency continued in the part from which the opacity was removed, and the patient ever afterwards saw very fairly.

These are all the facts and testimonies, *pour et contre*, which the commendable zeal of M. M. has collected, and unquestionably they form a useful addition to our stock. Finally, the author concludes with Professor Rosas' two cases at Vienna in 1833-4, and with a minute account of Dr. Gulz's case in 1842.—*Lond. & Ed. Monthly Journ. Med. Sci., July, 1844.*

59. *Spontaneous cure of Cataract.* By Dr. GIEHL.—A stone-breaker, who had suffered from cataract of the right eye from his youth, had the misfortune, whilst pursuing his occupation, to have his left eye struck by a splinter, which produced a violent concussion of the eye, and gave rise to inflammation and loss of vision. The man applied to Dr. G., who, on examining the eye, found, along with considerable inflammation, a completely formed cataract. He combated the former symptom by antiphlogistic remedies, and advised the patient, as soon as all irritation in the left eye should have disappeared, to have the cataract removed from the right one, in which the power of vision had been lost at an early period. On this the patient applied elsewhere for advice, and consulted Dr. S. in A.

In order to examine the eye more minutely, the latter dropped into it a solution of the extract of belladonna; in consequence of this the pupil dilated largely; at the same time, the opaque lens fell into the anterior chamber; and vision was immediately restored. The lens became absorbed by degrees, and the patient was cured.—*Lond. & Ed. Monthly Journ. Med. Sci., Aug. 1844, from Allgemeine Zeitung für Chirurgie, &c., April, 1843.*

60. *Death from Fright after the operation for Solution of Capsular Cataract.* By JONATHAN TOOGOOD, M.D.—J. G., aged 23, of a scrofulous and hysterical temperament, was admitted into the Bridgewater Eye Dispensary, February 16, 1839. She stated that she had always enjoyed good health to the age of sixteen, and had taken the charge of a dairy; that after this period the catamenia not appearing, she became subject to headache, had frequent attacks of hysteria, lost flesh, and was affected with a severe form of porrigo, which no medical treatment relieved. For the last five years the proper functions of the uterus had entirely ceased. About midsummer last she was suddenly seized with an acute pain in the left eye, accompanied with dimness, which, in a few hours, became so much worse that she was barely able to distinguish light. A fortnight ago the right eye became similarly affected, attended with the same sensations, and as speedily followed by complete loss of vision. On the 18th, the operation for solution was performed posterior to the iris, in both eyes, and the cataracts broken up. Nothing unusual occurred, but on the next morning she complained of pain in the right eye, extending over the temple and brow, and the iris appeared somewhat hazy. Leeches were ordered, a plaster of opium and belladonna to be applied over the brow, and five grains of hydrargyrum cum creta, with three of Dover's powder to be taken every four hours. The proposal to apply leeches excited the most extraordinary alarm in her mind; she exclaimed immediately—"Oh, I can never have leeches; I shall die if I have leeches." He. breathing became

very much hurried and laboured, her apprehension for her ultimate recovery so great, that every means of quieting her alarm failed; palpitation of the heart succeeded, with delirium and great prostration of strength, with violent perspiration, and, in spite of all treatment, she died at 1 A.M., the next day, breathing to the last in the same laborious manner.—*Prov. Med. & Surg. Journ.*, June 26, 1844.

61. *A case of partial Amaurosis cured by the aid of Urtication.* By M. POLTO.—A woman, 35 years of age, habitually healthy, had, in September, 1835, consequent upon her last confinement, an exfoliating exanthema covering the whole body. Being exposed to cold it completely disappeared: from that time there ensued general indisposition, derangement of the digestive organs, obscurity of vision and bronchitis. This state of things existed till the month of January, 1837. M. Polto having been called in, found the patient in bed, nearly blind, weak, and coughing continually; she could scarcely distinguish a ray of light; every thing appeared to her enveloped in a thick mist; the pupil was clear but immovable. M. Polto at once prescribed the use of hot diaphoretic drinks, afterwards dry friction, mustard poultices, blisters, and tartar emetic ointment. There was an improvement; the cough became less troublesome, the strength revived; the dryness in the skin, however, and the amaurosis still remained; many anti-amaurotic collyria were used without any success. The middle of June arrived, and M. Polto proposed submitting the patient to urtication and flagellation; he gathered some large fresh nettles, and having tied them up in bundles, he operated in the following manner:—The patient lying naked upon the bed, the operator commenced beating with the nettles, the feet, legs, thighs, buttocks, trunk, arms and neck; the head alone was spared. Immediately after she was made to lie down between two blankets, mustard poultices were applied to her feet, and hot drinks administered. She passed a most uncomfortable night, but in the morning the skin did not present any eruptive reaction. For five days the flagellation was repeated morning and evening. The skin bled in many places from the action of the nettles; she became, in consequence, dreadfully tender; and at last she was covered with a mixed eruption, partly erysipelatous, partly papular, partly purpurous, partly vesicular, partly phlegmonous, partly erythematous. Fever, conjunctivitis, cephalalgia and tinnitus aurium ensued; full pulse, urine scanty. Blood-letting, infusion of digitalis, and tartar emetic wine, were ordered. The symptoms abated, the eruption exfoliated, but the purpura remained for nine days; some of the papules suppurated. At the very moment of the cutaneous reaction, the sight began to improve; the patient distinguished persons when they approached her, and at last the functions of the eye became restored to a perfectly normal state.—*Prov. Med. & Surg. Journ.*, 26 June, 1844, from *Giornale delle Scienze Mediche di Torino*.

62. *Tetanus consequent on the treatment of Fistula Lachrymalis, by the insertion of Scarpa's style.*—A woman, 50 years of age, of lymphatic temperament, subject to rheumatism, was anxious to get rid of an epiphora, or involuntary flow of tears, which had troubled her for some considerable period. A surgeon consequently made an incision into the affected parts, and inserted Scarpa's pin [style]. During the operation the patient complained of pain, which extended itself from the artificial canal to the eye, the cheek, the forehead, and the angle of the jaw. Eight days passed, when, after a restless night, the patient perceived that she could not open her mouth. In the evening, M. Petri, who was called in, discovered a contraction of the temporal and masseter muscles, and general convulsive movements. He proposed to remove the lachrymal pin, but the ordinary medical attendant, thinking it was only rheumatic, would not consent. The patient was bled, and twenty leeches were applied to the neck. The following day the contraction had reached the neck and trunk; the arms next became affected, and, lastly, general convulsions supervened. The pin was removed and opium exhibited; but, notwithstanding a deceptive remission, the patient sank on the fourth day.

On examination, the lachrymal passages presented no extraordinary lesion. Permission was not obtained to examine any other part of the body.

A similar case was communicated to M. Petri by Dr. Betti, who witnessed its occurrence in the practice of Vacca. The tetanic symptoms immediately followed the introduction of the pin, but this celebrated surgeon suspecting the cause, removed the pin [style], and the trismus in a short time gave way.—*Prov. Med. & Surg. Journ.*, from *Gazette Toscana delle Sc. Med.*

63. *Intermittent Blindness*.—Mr. BRADSHAW related to the Reading Pathological Society the very interesting case of a French lady, aged 37, who was seized with fits of complete blindness. They came on suddenly without probable cause, night and day, irregularly, without periodicity, and each fit lasted about three hours. During the attack the pupils were widely dilated, there was complete blindness and perfect immobility of the eyes and their appendages. After the attack they resumed their wonted activity, and were apparently in a perfectly healthy condition. In other respects the lady was in the best possible health. This affection had continued for some years, and the fits recurred with about the same frequency, viz., three in a fortnight. She had submitted to a variety of treatment without benefit. Her sister was affected in a similar manner.—*Prov. Med. & Surg. Journ.*, 24 July, 1844.

64. *Spasm of the Orbicularis Palpebrarum*.—Mr. MAY mentioned to the Reading Pathological Society the case of a lady, aged 34, who had been affected for seven years with almost continual spasm of the orbicularis palpebrarum, and the muscles allied in the production of frowning.—*Ibid.*

65. *Artificial Pupil made in the Superior Eyelid*.—In a case of contraction of the orbicular muscle of the eyelid, which had resisted every remedy, even the twice-repeated section of the muscular fibres, M. GEROLD resorted to the following operation, which he has been the first to propose and to execute. After introducing a small, flat piece of wood, well oiled, underneath the superior eyelid, exactly opposite the pupil of the eye, he made a crucial incision, which completely divided the skin, the muscle and the mucous membrane. The external skin was then dissected off the four flaps thus formed, and the mucous surface was turned outwards and fastened to the base of the flaps, so that the mucous membrane formed the circumference of the artificial opening. No accident supervened, and vision was restored; the patient wore spectacles as a precautionary measure.

Such intractable cases as the above are of very rare occurrence; still the operation of M. Gerold, which is a most ingenious one, is a valuable addition to science. It may likewise be resorted to in cases of partial or complete paralysis of the third pair, with prolapsus of the superior palpebra. The longitudinal section of the eyelid, which has been proposed in such cases, is evidently a much more objectionable operation; it interferes more with the contraction of the orbicular muscles, exposes a greater extent of the eye to the external atmosphere, and consequently renders the inflammation, which usually follows such exposure, as in paralysis of the seventh pair, much more probable.—*Lancet*, March 23, from *Annales Belges d'Oculistique*.

66. *Ligature of the Eyelids*.—In chronic inflammation of the eyes, with relaxation of the superior eyelid, ulceration of the cornea and incipient pannus, the success of this slight operation is often surprising. Often the day after it has been performed, the ulcerations are favourably modified, and the vascularity of the cornea and conjunctiva has disappeared. The same remark may be made with reference to other forms of chronic inflammation of the cornea, to blepharoplegia and blepharoptosis. This remedy alone is frequently sufficient to effect a cure. M. AMMON thus describes the operation:—A transversal fold is made in the upper eyelid, and the base of this fold is pierced, by means of a curved needle, with two threads of cotton. The extremities of this kind of seton are

then fixed on the forehead by means of a piece of diachylon, the eyelid being sufficiently raised not to touch the globe of the eye. This *suspension* of the eyelid has a double influence. It acts as a derivative or seton on the one hand, and, on the other, preserves the eye from the contact of the inner surface of the eyelid, which is often granular, and occasions and keeps up the inflammation. There is only one objection [a very weighty one we think] to this operation, it may give rise to erysipelas of the eyelids.—*Ibid.*

67. *Cyanuret of Potassium for removing the stain of the Conjunctiva caused by Nitrate of Silver.*—It is well known that nitrate of silver, when long used, has the effect of turning the conjunctiva of a dark olive colour and greatly disfiguring the patient. M. Guthrie, in a late clinical lecture, stated that a solution of the cyanuret of potassium (three to six grains to the ounce of distilled water) applied by drops every other day, is an admirable remedy for removing this olive colour. Mr. BROCK is said to have first proposed this remedy; which is also equally effective in removing the stain made by iodine on the skin.

68. *Acute Retinitis caused by the use of the Microscope.*—Mr. W. W. COOPER communicated to the Royal Medico-Chirurgical Society, (June 18, 1844,) a case of acute retinitis caused by the use of the microscope. The patient was engaged in dissecting the nerves of the human tongue under a powerful microscope; the nerves, having been cleanly dissected, were of a dazzling white, and whilst he was intently regarding them through the microscope, the sun, which had previously been obscured, suddenly shone forth with all its brilliancy upon them. Acute pain was instantly felt in the eye, pervading the whole globe. In about twenty minutes the pain subsided, though all uneasiness did not cease until evening.

The following day, the eye not being painful, the patient incautiously used it to complete his dissection, when the same occurrence took place as on the preceding day. This was followed by great and deep-seated pain, pervading the whole globe, with much intolerance of light, &c. Under the use of leeches to the eye, followed by frictions with mercurial ointment and opium, mercury and cicuta and other appropriate remedies, entire recovery took place.—*London Med. Gaz.*, July, 1844.

69. *Foreign body four years in the Eye.*—The following remarkable case of a foreign body, of considerable size, remaining for nearly four years in the interior of the eye, is related by M. CASTELNAU, and published in a recent number of the "*Archives Générales de Médecine.*"—

On the 29th of June, 1838, M. B., æt. 30, foreman of the workshop of the Versailles railroad, a man of strong, robust constitution was wounded in the right eye. The accident occurred in the following manner:—M. B. was assisting a workman to introduce into some wood-work a steel wedge, which he was striking with a hammer of ten pounds weight, fixed at the extremity of a handle three feet long, when he suddenly felt a violent shock in the eye. A flood of tears passed from the eye, which was also the seat of a certain degree of pain, and sight was instantly destroyed. The patient remained some time sitting in the workshop, under the impression that these symptoms would soon disappear, as had frequently been the case before, under similar circumstances; but finding that they did not mitigate, as he had expected, after waiting some time, he returned home, and having thrown himself on his bed, slept quietly several hours. On awaking, he found that his sight had not returned, and that the pain still persisted; he, therefore, came to Paris, and consulted M. Sichel. This surgeon told him that the cornea was perforated; that the sight of the wounded eye was irretrievably lost; that it would be necessary to act energetically, in order to prevent the development of inflammatory symptoms; and that once that danger passed, there would be nothing to fear, as no foreign substance had remained in the eye. Thirty leeches were, therefore, applied behind the ears: frictions were resorted to, with an ointment of the nature of which the patient is ignorant; cold

was applied for some time to the head, by means of cloths soaked in cold water; and several mustard foot-baths were taken.

The inflammation which followed was not intense, but the pain persisted, and was accompanied by the continued oozing of an aqueous fluid, which soon produced excoriation on the cheeks. The wound of the cornea did not cicatrize. The treatment above mentioned was continued, with slight alterations, for nearly a month; at that epoch the patient consulted M. Carron du Villards, who merely confirmed the statement of M. Sichel. Soon after the wound of the cornea cicatrized. From that time the pain and oozing of fluid from the eye gradually diminished, and the patient was soon able to resume his labours. At first he could still distinguish day from night, but the sensation of light became, by degrees, more and more indistinct, until, at last, he lost it entirely, about eighteen months after the accident.

Two years had passed without any new accident, without even any pain manifesting itself. During that time the health of M. B. had remained constantly good, when one night he was seized with such intense pains in the head, more especially in the right eye and on the right side, that he uttered loud screams, and thought his reason would give way. A host of remedies were resorted to, leeches, opiates, cold applications, &c., during a day and a night, without producing any alleviation. On the second day the pain diminished a little, but it was not until the third that he was able to obtain any rest. On the fourth day all had disappeared, and for eighteen months he had no return of the cephalalgia.

At the end of February, 1842, three years and a half after the accident, I was called to see M. B. for the first time. He stated to me that for several days he had suffered pains in the right eye, which, at first dull and irregular, had become sufficiently violent to prevent his sleeping. The conjunctiva was rather red, and the cornea presented in its centre a conoidal prominence which at once attracted my attention. On inquiring whether a foreign body might not have penetrated into the eye, M. B. gave me the details which I have just narrated. He also told me that, having endeavoured to discover what it was that struck him, he found, on one side of the wedge, the trace of a splinter; that this splinter could not be found, but that it was of too considerable a size for it to have been possible that it should have entered his eye, and remained there so long, unless it had separated into several fragments. The opacity of the cornea was such as to prevent any examination of the interior of the eye; the eye itself had rather shrunk, as if it had lost a part of its humours. From the time of the accident the patient, who was accustomed to sleep on the right side, had been unable to do so without suffering great pain in the eye. These data not having completely dissipated my doubts with respect to the presence of a foreign body in the eye, I merely prescribed cold applications, frictions with a belladonna ointment and mustard foot-baths. These measures gave no relief; the redness and pain increased, and in the course of a few days there appeared on the most elevated portion of the prominence of the cornea, a small solid angle, which its great hardness evidently showed to be a metallic substance. It was thus evident that all the accidents owed their origin to the presence of this foreign body, and I had to choose between waiting for the inflammatory process which existed, to expel it from the eye, or its extraction by a surgical operation. I thought it better to adopt the latter course, in order to put an end to the torture the patient was suffering, and therefore proposed it to him. At first he refused to submit to any operation, and I was consequently compelled merely to resort to palliative measures. A few days afterwards, however, on the 6th of March, 1842, he again called on me; he was suffering severely, not having slept for three days. The conjunctiva was swollen, and of an uniform red hue; the angle of the foreign body actually raised the upper eyelid, and had produced an ulceration on its internal surface. The metallic angle stood out about a line beyond the cornea, which held it encased like the setting of a gem; there was no suppuration of the cornea around it. The operation appeared likely to be much easier than on

the day when the foreign body was first perceived, owing to its being so much more evident; the patient himself was anxious that it should be performed.

A small incision, less than a line in length, was made on each side of the foreign body, in order to separate it from the adjoining tissues. Although the adhesions between the foreign body and these tissues were very close, yet, by passing the narrow blade of a bistoury between them, they were easily separated from one another; the surfaces of the metallic fragment were thus entirely denuded, and then came the most difficult period of the operation. Whenever the slightest traction was exercised on the foreign body, in order to bring it sufficiently forward to pass the bistoury behind it, the patient suffered excruciating pain, and yet it was impossible to separate the adhesions which its posterior surface had contracted with the adjacent tissues, without thus bringing it forward. In order to overcome this difficulty I exercised slight lateral pressure on the external angle, so as to make it act as a lever, and bring the posterior angle forward, and then, passing the extremity of a small pair of curved scissors behind, gradually excised the pedicle. The operation lasted five or six minutes; the latter part of it only was painful. When it was terminated the patient had a syncope, but of only two or three minutes' duration. He soon recovered, and was able to return home; I told him to keep cloths, soaked in cold water, continually applied to the eye, and to send for me if the pain increased, or if any febrile symptoms supervened. Instead of increasing, however, the pain diminished about an hour after the operation, and the patient slept a great part of the night. On the 7th he scarcely suffered at all, and on the 8th returned to his work, which he has never left since. The redness and swelling of the conjunctiva had diminished as rapidly as the pain. The cavity which resulted from the extraction of the foreign body has gradually filled, and there now merely exists a slight depression corresponding to the perforation of the cornea. The eye is shrunken; the cornea is of a marbled-gray colour; the sclerotica remains natural.

The foreign body was a fragment of iron, representing exactly a regular triangular prism, two nearly equal surfaces of which formed a right angle; its length was seven lines, the width of the surface opposed to the right angle one line and a half; the total weight was one drachm and fifteen grains.

Among the many curious cases which science possesses of the sojourn of foreign bodies in the economy, there is, perhaps, none which can be compared to the one I have just narrated. It is difficult to say what was the precise region of the eye occupied by the metallic fragment; it is, however, certain that it was partly situated in the vitreous humour, as the two chambers of the eye would not have been large enough to contain it. A very remarkable feature of the case is its expulsion, which partly took place without any suppuration whatever. When the operation was practised the edges of the aperture of the cornea through which the metallic angle protruded, appeared as if recently cut by a sharp instrument. There was not, either, the slightest suppuration after the operation. Were the acute pains experienced by the patient two years after the accident to be attributed to the presence of the foreign body, and if so, what occasioned them? The first question may be answered affirmatively, as he had never suffered similar pains previous to the introduction of the metallic fragment into the eye; but it is more difficult to answer the second. It is, however, probable that the foreign body, as it gradually advanced from the depth of the eye to the cornea, came in contact with one of the divisions of the ophthalmic branch, and that the pains experienced by the patient were the result of this contact. The correctness of this hypothesis is rendered still more probable from the circumstance that decubitus on the right side invariably gave rise to pain in the eye. Since the extraction of the foreign body decubitus on the right side has again become easy, and is now as habitual to the patient as before the accident. This case shows how difficult it is, in some cases, to make a correct diagnosis, and how inscrutable are sometimes the operations of nature.—*Lancet*, Feb. 24, 1844.

## MIDWIFERY.

70. *Chloride of Iron in Uterine Hemorrhages*.—Prof. D'OUTREPONT has employed with much success the chloride of iron for arresting uterine hemorrhages, both during and subsequent to labour. He used a saturated solution of the salt in distilled water. Sponges and tampons are soaked in this solution, and, after first using an injection, containing an ounce of this fluid, he plugs the vagina with the tampon, prepared in the manner just mentioned.—*Gaz. Méd. de Paris*, 21 Oct., 1843, from *New Zeitschrift für die Geburtskunde*.

71. *Cephalatomata of New-born Children*.—Prof. D'OUTREPONT, to show that cephalatomata are not produced by a mechanical cause, quotes four cases, three of abortion, and one where the mother died of apoplexy at the seventh month of utero-gestation, and the child was extracted by the Cæsarian section, in all which the infants had cephalomatous tumours.—*Ibid*.

72. *Dropsy of the Uterus and Uterine Tympanitis*.—At the meeting of the Scientific Congress at Strasburgh, in 1842, MM. Stoltz and Nægele, asserted that uterine tympanitis, or uterine dropsy, cannot possibly occur. Dr. TESSIER, of Lyons, in an interesting article in the *Gazette Médicale de Paris*, Jan. 5, 1844, has shown that it is not only possible for these diseases to occur, but that they actually have occurred.

He relates a very well-marked case of uterine tympanitis under his own observation, and has collected others related by different authors. The subject of the case observed by himself was a woman 43 years of age, very nervous temperament, who entered the Hôtel-Dieu on the 4th May, 1840, to be treated for chronic metritis, complicated with hysteria.

The uterus began to enlarge after her admission, and her menstrual discharge not reappearing, the patient considered herself to be pregnant. Six months after the suppression of the menses, the uterus having risen almost to the umbilicus, the patient was suddenly seized with pains similar to those of labour, and a large quantity of fœtid gas was discharged by the vagina. As the gas was discharged, the size of the abdomen diminished, and in a few hours acquired its ordinary size. Three years have elapsed, and the patient has since been often similarly affected.

Cases of hydrometra are still more frequent and conclusive, and Dr. T. gives a summary of many examples of this affection.

73. *Case of Enteritis simulating Pregnancy and Labour at the full time*.—A very remarkable and interesting example of this is related by M. BARBIERI in the *Lond. & Ed. Monthly Journ. Med. Sci.*, March, 1844.

The subject of the case, Mrs. W., was 32 years of age, the mother of two living children, born at full time, and of one still-born at the eighth month; she had enjoyed good health for the last fifteen years. M. B. found her suffering severe and repeated uterine pains, such as occur at the end of the first stage of natural labour, and recurring, at an average, every five minutes; they commenced in the back, and stretched round the pelvis and down to the anterior part of the thighs. M. B. obtained the following history of the case:—

"The catamenia had been absent for nine months and two days; she quickened at the end of four months and a half; the motion of the fœtus had become progressively stronger every month; she had experienced morning sickness, vomiting, heart-burn, irresistible longings, aversion to wine and tea, dysuria, spots and epipheldes on the face and skin, frightful dreams, cramp and pain in the legs for the last fortnight, hemorrhoids, varicose veins, and anasarca of the legs for the last two months. All these, with the exception of anasarca, cramp, and the aversion to wine, had occurred in her three former pregnancies."

The size of her abdomen was that of a woman at the full period of utero-gestation; was hard, and the uterine enlargement felt prominent and distinctly cir-

cumscribed; "the entire abdomen bore the most minute and firm pressure at any point, without her experiencing the least pain or inconvenience. Her breasts, naturally rather small, were distended with an abundant secretion of good rich-like milk, such as to render it necessary to apply breast-glasses, which were emptied every quarter of an hour. This secretion of milk had occurred for the last two months and a half, and had never taken place in any previous pregnancy. The silvery lines referred to by Dr. Montgomery were moderately visible. The areola around the nipple was strongly marked; the nipple was turgid and prominent; about fourteen of the glandular follicles immediately around the base of the nipple were sufficiently conspicuous to indicate a former pregnancy, but by no means such as to justify the conclusion of its present existence." She, moreover, stated that the liquor amnii had been discharged about half an hour before M. B.'s arrival, and that she had a slight sanguineous discharge for the last three days, which caused her some anxiety, as it had rather an offensive odour. The nausea and vomiting had left her for the last three months; her pulse was 130, full, hard and incompressible; tongue clean and moist, and the bowels open.

Notwithstanding the above formidable array of the signs of pregnancy, Mr. B. felt dissatisfied at the absence of the glandular follicles at the base of the nipple, having always found them very prominent in all her former pregnancies; besides, M. B.'s educated ear was not reconciled to her present pains. He therefore hinted his doubts, at which she was very indignant, referring him, "*first*, To all the signs individually, laying great weight on the absence of the catamenia for nine months, stating that the menstrual secretion had previously always been healthy, as to time, quantity and quality; *second*, To the size and hardness of her abdomen; *third*, To the quantity of her milk; *fourth*, To the quickening and motion for the past four months and a half; *fifth*, To her previous experience of pregnancy; and, *sixth*, To the impossibility of her reckoning being wrong, owing to the absence of her husband during the entire period." M. B. was now obliged to leave the patient for two hours, and, on his return, he found her labouring under such powerful expulsive pains as nearly led him to alter his opinion of the case. An examination was now made per vaginam.

"The external parts were greatly relaxed, and the vagina so much dilated as easily to admit my closed hand, and from it a sanguineous discharge issued, whose odour and external characters could not be distinguished from those of the ordinary lochia, unless, perhaps, in being somewhat more offensive; but we all know that this smell, like that of sweat, is subject to considerable variety. The uterus was in an unimpregnated and healthy state, as regarded its body, cervix and orifice; the os uteri retained distinctly its transverse orifice, with well-defined and firm margins. I felt at a loss to account for the so-called discharge of the liquor amnii already referred to. It could not proceed from hydatids, cauliflower discharge, nor those splashes of urine which sometimes come away from pregnant women, as noticed by C. M. Clarke, owing to the state of the uterus. The catheter was therefore introduced, and upwards of two pints of high-coloured, transparent urine drawn off, divided into two portions, and reserved for analysis.

"As the bowels had been opened by castor-oil a few hours before my arrival, I proceeded to examine the abdomen under the chemise. In addition to what has already been stated, I found a pale-brownish stripe, nearly an eighth of an inch in breadth, in the mesial line, running from the umbilicus to the ensiform cartilage, but which certainly did not correspond to the description or opinion given of it by Mr. Turner."

Percussion was tried, but M. B. having no particular experience in it, places no dependence in the result. He did not auscult the abdomen. On examining the dorsal region, M. B. found that firm pressure could not be endured without her wincing at every attempt. Perplexed as the case was, M. B. now arrived at the conclusion, "either that it was inflammation and great enlargement of the kidneys, or inflammation of the posterior aspect of the intestines; but how could the immense indurated abdominal tumour be accounted for, more especially as the bowels were represented always to have been open?"

The pulse being strong and frequent, 64 ounces of blood were abstracted from a large orifice in the erect posture without inducing the least approach to syncope; but with great and immediate effects on the pain and expulsive action. "In about ten minutes, a state of the most profound syncope and collapse followed, which continued nearly a quarter of an hour, accompanied by an incredible discharge of liquid feces, amounting to at least four large chamber urinals, with an immense quantity of flatus, more noisy than offensive. Alarming as the case now was, I determined in trusting to her age and former constitutional powers. On recovering from this state, three grains of opium, and eight of calomel, were administered to prevent reaction. On examining the abdomen, the enlargement and induration had disappeared; and all the vertebræ could be easily touched through the parietes of the abdomen. She was now necessarily left for eight hours, owing to an obstetric engagement. At my second visit, I found she had enjoyed six hours comfortable sleep and freedom from pain; that the pain had returned during the last two hours, but was, for the first time, confined to the abdomen, where the slightest pressure could not be endured, while the back was free from it. The blood was now examined, and found to have a buffy coat of more than two lines in thickness, greatly cupped, firm and elastic; the coagulum was very dense, and floating in a small quantity of serum. One portion of her urine was then submitted to the action of heat at the temperature of 170°, and coagulated rapidly, showing distinctly the presence of a large quantity of albumen. The case appearing one of enteritis, complicated, perhaps, with Bright's disease of the kidney, she was immediately bled to the extent of thirty-two ounces, in the erect posture, but without producing any of the former results. This was followed up by the application of forty leeches to the ileo-cæcal region, and the hip-bath when they fell off; a blister was applied over the entire abdomen, to be dressed night and morning with the *ungt. hydr. forl.*; and it was resolved to give her two grains of calomel, with a fourth of a grain of opium, every four hours. On the third day the inflammation seemed to have been subdued. On the fourth I had acute gastritis to contend with, and that alone; and notwithstanding the most energetic local treatment, and the immediate suspension of the calomel, she experienced no relief, except from the unceasing use of small portions of ice, from which, while the supply continued, she remained free from the burning pain and other uneasiness. This, however, failed on the 21st; and, after enduring several hours' suffering, she died on the 22d day of the acute attack.

*Morbid appearances.*—On the abdomen being opened, there was found increased vascularity and thickening of the peritoneum; effusion of coagulable lymph, in the form of flocculi, with about four ounces of pus into the peritoneal cavity. The stomach presented great vascularity; two patches, the size of a half-crown piece, of softening of its coats, near the pylorus; and nearly the whole of the small curvature was more or less deeply ulcerated. Great vascularity of the duodenum, ileum and rectum; a few very small patches of softening were seen on the coats of the colon; a number of circumscribed superficial follicular ulcerations, with one small perforating ulcer, were found in the last twelve inches of the ileum.

The kidneys were in every respect healthy, as also the uterus and all the other abdominal viscera.

74. *Pregnancy—error in Diagnosis.*—Dr. Cowan related to the Reading Pathological Society the case of a woman in the hospital who had not menstruated for the last seven months. She had been previously healthy, had menstruated regularly, and borne two children. Seven months before, she had a discharge of fluid from the rectum, resembling the menstrual, and which continued to recur at regular monthly periods. There was no discharge from the vagina. A tumour was discovered at the lower part of the abdomen, which he concluded to be ovarian. This tumour was first noticed about two months after the first discharge from the rectum. The disease of the ovary he thought sufficient to account for the vicarious position of the seat of the discharge. She had no

suspicion of pregnancy. In a short time she was dismissed the hospital with a recommendation to her medical attendant that paracentesis might be performed when it became necessary.

Dr. Cowan, at a subsequent meeting, candidly acknowledged that his diagnosis in this case was incorrect; that she had been delivered of a healthy child, and that all trace of tumour had disappeared. The importance of this case in a practical point of view cannot be overrated. If one, who can bring to his aid all the accomplishments of general and physical diagnosis, commits such an error, or rather I would say, such an oversight, how cautious should another be who may be less able and less accomplished.—*Harrison's Retrospective Address*, in *Prov. Med. and Surg. Journ.*, July 24, 1844.

75. *Abortion*.—In fifty cases of abortion, of which Dr. ROBERT LEE has preserved the histories, uterine hemorrhage took place, he says, in twenty-six. “In forty-six, the detachment of the ovum from the uterus was the consequence of disease in the embryo or its envelopes. In four cases only out of the fifty, could the accident be attributed to an external cause, nor could any change of structure in the ovum be detected. The morbid appearances most frequently noticed in these ova were the following: thickening of the uterine and placental decidua, hypertrophy or atrophy of the placenta, deposits of coagula of blood in the cells of the placenta and of the chorion, the decidua reflexa hard, yellow and nearly impervious, having the canals partially obliterated which pass between the cells of the chorion and decidual cavity. Cysts of the placenta and villi of the chorion, the vesicula umbilicalis shrunk and hard, fluid between the amnion and chorion, an excessive quantity of liquor amnii, the umbilical cord unusually short or long, and firmly twisted, the embryo totally absent or very imperfectly developed, or malformed. Induration and thickening of the decidua, and the formation of clots in the cells of the placenta and of the chorion, were present in a great proportion of these ova, and to these causes the death of the embryo and the premature expulsion of the ovum, were chiefly to be attributed. In some of these cases the entire ovum was expelled with little pain and discharge, and by the uterine contractions alone. In others, the embryo escaped, leaving all the membranes adhering to the uterus, or the embryo was expelled enveloped in the amnion and chorion, and the decidua left behind for days, or even weeks. Not unfrequently the uterine decidua was torn off all round from the placental decidua, and left adhering to the uterus, while the remaining parts of the ovum, covered by the decidua reflexa, escaped.

“In all cases of threatened abortion, the condition of the os and cervix uteri should be ascertained accurately by an external examination; and if the orifice is open, and the neck shortened, and the ovum felt pressing into it, no good can result from attempting to prevent the expulsion of the ovum by anodynes. It is better merely to moderate the discharge, and leave the case to nature. If the os uteri is widely dilated, and the ovum has nearly escaped, it may at once be removed by the fore and middle fingers of the right hand. But this should not be attempted, unless there is the greatest probability of extracting the ovum entire. Where the ovum remains entirely within the uterus, and there is a profuse discharge of blood, one of the most effectual means of checking this is to pass a large, soft, dry sponge covered with lard into the vagina, which can easily be done in all cases, and firmly pressed up against the os uteri. This does not interfere with the application of cold to the hypogastrium and external parts, nor with the internal exhibition of acids, lead, ergot, or whatever else may be thought requisite; and the sponge in the vagina not only checks the hemorrhage, but it has an influence in exciting the contractions of the uterus, and closing the vessels from which the blood is flowing.

“I have recently been informed that premature labour may be induced by the same means, without forcing the sponge into the os uteri. I have had no opportunity of trying this method, but if it should always be successful in bringing on labour, there can be little doubt that it will possess great advantages over all the

other means which have hitherto been employed for this purpose, and which have been described in the third Report.—*Clinical Midwifery.*

76. *Arm Presentations.*—Dr. ROBERT LEE records, in his *Clinical Midwifery*, the histories of sixty cases of arm presentation. In a large proportion of these, the operation of turning was undertaken in the most unfavourable circumstances, both for the mothers and their children, after the liquor amnii had entirely escaped, and the uterus had not only been contracting for many hours around the child, but repeated unsuccessful efforts had been made to deliver. Seven women died from rupture of the uterus, and three from inflammation of the uterus. Laceration and inflammation of the uterus are, therefore, the consequences to be dreaded after turning. Four of these cases of rupture occurred in the practice of other accoucheurs, and three in patients under his own care, and where no great difficulty was experienced, or force employed in turning. The most perplexing cases were those in which there was distortion of the pelvis with arm presentation, and the most easy and successful those twin cases in which the superior extremity of the second child presented, and the operation of turning was promptly performed.

77. *Puerperal Convulsions.*—Dr. ROBERT LEE, in his *Clinical Midwifery*, has recorded the histories of forty-six cases of puerperal convulsions, of which fourteen proved fatal; five were delivered with the forceps; eleven by the operation of craniotomy, and two by turning. Thirty occurred in the first pregnancy or labour, and in twenty-one the insensibility and convulsions took place before parturition had commenced. A great proportion of the children were still-born, though expelled by the natural efforts. The brain was examined in six of the fatal cases, and in four various morbid appearances were observed in its structure: in the other two nothing unusual was visible. The fits were preceded in some cases by flushing of the countenance, headache, giddiness, drowsiness, depression of spirits, and partial loss of consciousness and memory; in other cases no premonitory symptom was observed. Several of the most severe cases occurred in weak, delicate women who had suffered in early life from hysteria or epilepsy, or had been exposed to great mental anxiety and distress during their pregnancy. In two of the fatal cases, and one which ended favourably, the disease speedily followed the use of stimulants and indigestible food. The fits immediately ceased, or became far less frequent and violent, in eighteen of the women after delivery; in others it had no effect in arresting the progress of the disease. Copious blood-letting was had recourse to in the greater number of cases here recorded, fortunate and unfortunate; but in some nervous women who recovered, depletion was not carried to the extent usually considered requisite in this affection.

Dr. Merriman has seen forty-eight cases of puerperal convulsions, of which eleven ended fatally; Dr. Ramsbotham twenty-six, ten of which were fatal; Dr. Collins thirty, five fatal; Dr. Ingleby thirty-five, eleven fatal; Madame Lachapelle, sixty-one. I cannot tell how many of them recovered.

The whole history of the phenomena of puerperal convulsions leads to the conclusion that the disturbed state of the brain depends upon the peculiar condition of the nervous system of the gravid uterus in the latter months of pregnancy. The dissections which I have made of the unimpregnated uterus, and of the gravid uterus in the third, fourth, fifth, sixth, seventh and ninth months of pregnancy, and after delivery, demonstrate that it possesses a great system of ganglia and nerves, which enlarges with the coats, blood-vessels and absorbents of the organ during gestation, and which returns after parturition to its original condition before conception takes place. It is by the influence of these nerves that the uterus performs the varied functions of menstruation, conception and parturition, and it is solely by their means that the whole fabric of the nervous system sympathizes with the different morbid affections of the uterus. If these ganglia and nerves of the gravid uterus could not be demonstrated, its phy-

siology and pathology would be completely inexplicable, and the causes of puerperal convulsions wholly unknown.

78. *Singular Osseous Deposit within the Cranium of Pregnant Women.*—In our preceding Number, (p. 174,) we noticed the very remarkable researches of M. Ducrest, in reference to a bony production upon the surface of the cranium in women who have died in childbed, and we now learn from an article in the *Prov. Med. & Surg. Journ.*, from *Omodei's Annali di Medicina*, that ROKITANSKY, of Vienna, one of the most experienced anatomists of the day, has observed the same production. It had also been previously noticed whilst epidemic puerperal fever prevailed in Vienna in 1834.

In the midwifery hospital at Vienna, from 1827 to 1837, inspection took place of the bodies of 1465 women who died in childbed; and in 1221 of these victims of puerperal fever in all its various forms, there was found a recent thin osseous deposit upon the internal surface of the cranium, mostly of the parietal and frontal bones, nearly toward the basis. Rokitansky is persuaded that this new deposit of osseous matter within the cranium is not connected with puerperal fever, but occurs during utero-gestation, under particular circumstances not yet defined, for he has met with it in those pregnant women who have died suddenly from an accidental cause, before, during, or soon after delivery.

79. *Scirrhus of Uterus, complicated with Ovarian Dropsy.* By Mr. ELKINGTON.—Mrs. Low, aged 41, a strong, active woman, mother of one child, first felt unwell in January, 1843; she had dyspepsia and pain in her back, which were relieved by tonics, &c. In April she had an inflammatory attack, affecting, she says, the lower part of the belly, accompanied by fever, pain about the pubic region, constipation, and pain in making water. She was relieved by leeches and antiphlogistic measures; she then went into the country and remained there for some weeks. She consulted me on her return in September. I learnt that whilst she was in the country she had had swelling of the right leg, which, from her description, was probably phlegmasia dolens; obstinate constipation, pains about the pelvis, and a constant watery discharge from the rectum. She now complains of great difficulty in regulating her bowels, and cannot keep them open without aperients; she says when the motions are figured, they are very small, not thicker than the little finger. She has a frequent watery discharge from the rectum, which escapes generally when she lies down, and to the amount perhaps of a tablespoonful or two each time. Whilst she was in the country she states that she was obliged to get up in the night every ten or fifteen minutes to evacuate the bowels, and that nothing passed but a small quantity of clear water. On examination externally a small circumscribed tumour in the left iliac fossa, about the size of a small orange, immovable and semi-elastic, was detected. On examination per vaginam, I found a firm, inelastic tumour, occupying the greater part of the cavity of the pelvis; it was low down, hard and fixed, and seemed to consist of enlargement of the uterus. It appeared to occupy anteriorly more the left side of the pelvis, and the left side of the vagina was puckered, as if adhesions were formed. On examination per rectum, the tumour was found posteriorly larger on the right side, and encroaching very much on the cavity of the rectum, greatly interfering with the passage of the feces. She had very little discharge from the vagina, and that merely an increase of the natural secretion; there were slight tenderness and swelling of the lips of the os uteri. She had lost flesh, and was gradually getting thinner. She suffered from a sensation of weight and heaviness in the pelvis, but not much from pain. The most distressing feature of the case was obstinate constipation. The legs became œdematous; she gradually got thinner and weaker, became dropsical, increasing to a great size in the belly. She died Feb. 2, 1844. The treatment was palliative.

*Post-mortem*, Feb. 3d. We could only get permission to examine the abdomen. About two gallons of serum were drawn off from the cavity of the peritoneum. On opening the abdomen we found the peritoneum lining the parietes

covered with numerous small tumours, varying from the size of a pea to that of a large marble; the omentum was like a bunch of large grapes; the under surface of the liver was studded with them, and the small intestines had also a sprinkling of them. There were bands of lymph tying the intestines to the parietes: there was also lymph deposited on the liver and spleen. With some difficulty we removed the contents of the pelvis. On examination we found the uterus enlarged and very hard, having the true scirrhus character, the os patulous; the lips swollen, and upon the anterior lip three small ulcerations, the largest about the size of a split pea, and superficial. There is a scirrhus growth from each side of the body, commencing at the upper part of the cervix, and which terminates in a cyst the size of a walnut, filled with serum; the right Fallopian tube is enlarged, hardened, and firmly united with and forming part of the uterine tumour; the left Fallopian tube is united with the surrounding parts; posteriorly, the rectum is adhering to the lower part and middle of the uterus, from which it cannot be easily separated; behind the fundus there is a portion of the ileum adhering; on the fore part the bladder adhered firmly to the uterus throughout, and was with difficulty dissected from it; the left ovary is enlarged to the size of a small orange, forming a cyst filled with fluid; the right ovary has formed a cyst, which has ulcerated, and discharged its contents into the rectum. A probe may be passed from the cyst into the intestine.

It is surprising that she felt so little pain, her sufferings being caused chiefly by her size from the effusion. This case points out the necessity of carefully ascertaining the condition of the uterus in all cases of ovarian dropsy, before attempting any operation for the removal of the ovarian cyst. It clearly shows the co-existence of the one with the other. Which was the primary seat of disease, the uterus or the ovaries, it is difficult to say; but it is probable that the uterus was the first to take on disease, from the extent to which the whole of that organ was affected, and the extensive adhesions formed between it and the adjacent parts. It is probable the reason she suffered so little pain was in consequence of the ulcerative process having so recently commenced. If the ovarian cyst had grown more rapidly, and acquired a larger size before the uterus had become so decidedly diseased, and before the general health had suffered to such an extent, it is possible that an attempt might have been made to remove the cyst. It demonstrates the necessity of great caution and nice discrimination in such cases, as well as the risk and danger of an operation.—*Prov. Med. and Surg. Journ.*, May 15, 1844.

80. *Uterine Disease.*—*Mechanical Dilatation of the Cavity of the Os and Cervix of the Uterus, as a means of diagnosis and treatment, in some affections of that organ.*

—Professor SIMPSON first showed the difficulty which exists in ascertaining some of the morbid conditions of the lining membrane of the cervix and cavity, in consequence of the small size of the normal opening into the organ. He pointed out that this opening may, by the use of a succession of *sponge-tents*, be enlarged to such a degree as to overcome, in a great measure, this difficulty. The kind of sponge-tent which Dr. S. has used is made in the manner of that described in most old works of general surgery. The pieces are pyramidal, of various sizes, and have a perforation in their base, to allow of their being temporarily fixed upon a curved wire or bougie, for their ready introduction into the os uteri. The bougie is withdrawn as soon as the sponge is lodged, and in a few hours the latter expands immensely in size. Previous to its introduction, a string is attached to the tent to allow of its easy withdrawal. Under the expanding power of the tent, the cavity of the os and cervix uteri may be dilated, and without any suffering to the patient, to such an extent as to allow the finger to pass a sufficient distance, for the purpose of ascertaining various points of diagnosis, which could not otherwise be arrived at. Dr. Simpson stated that he had employed the same means to facilitate some kinds of remedial and operative interference in this part of the body, such as the removal of those small vesicular polypi that are so frequently clustered upon the interior of the cervix.

In speaking of dilatation of the os and cervix uteri as a means of cure, Dr.

Simpson pointed out the results of this practice in the hands of the late Dr. Mackintosh in the cure of dysmenorrhœa and sterility, connected with normal and inflammatory strictures of the os uteri. His own results had not been so successful as those of Dr. Mackintosh; but he had now seen a considerable number of severe cases in which dysmenorrhœa that had previously resisted all other kinds of treatment, had at once yielded to the mechanical dilatation. Dr. Simpson had found the stricture occasionally at the os internum or opening between the cavities of the cervix and body, and not at the os tincæ. Dr. Mackintosh had effected the dilatation with long straight bougies of different sizes. Dr. Simpson had found them more easily used when slightly curved. He also showed other instruments, one of them like the dilater for the female urethra, which he had occasionally employed for this purpose. These instruments were all of them intended to be left in the os uteri for only a short period, and their introduction repeated from time to time, as in the usual treatment of stricture of the urethra in the male. Latterly Dr. Simpson had in his practice thrown aside these, and used another form of permanent bougie for this purpose, and he considered them to be greatly preferable. These permanent bougies were made of Berlin silver, the stem or part included in the uterine cavity was two inches and a quarter in length, the lower ends which rested in the vagina were bulbed and enlarged to the size of a large almond, and were perforated below for the purpose of being placed on a temporary handle, used in the introduction. One of the instruments was left in the uterine cavity for three or four days, and by that time the part was so much relaxed, that another of a much larger size could, in general, be easily introduced. They could easily be borne without the slightest inconvenience, and, indeed, without the patient being aware of their presence. Dr. Simpson pointed out that this permanent form of bougie altogether gave much less pain to the patient, and less trouble to the practitioner; was more certain and expeditious in its effects, and was especially useful when the surrounding tissues of the lips and cervix were in any degree indurated. Obstructed dysmenorrhœa sometimes depends on other circumstances than ordinary strictures of the os. It is sometimes seen in connection with the conical hypertrophy and elongation of the cervix. Dr. Simpson had found it in several instances accompanied with much morbid thickening of the anterior lip of the os uteri, the posterior lip being thin and healthy, and the os stretched out between them of an irregular crescentic shape. In such, and other instances, Dr. Simpson had divided the os uteri on each side to the extent of a few lines with a very narrow knife, or "*lithotome cachée*," and subsequently kept the part temporarily dilated with the sponge tent. He quoted cases of the perfect success of this simple and safe measure; it placed the parts in something of the same condition as that which they present subsequent to miscarriage; and this latter occurrence is known in general to leave without dysmenorrhœa those who have previously been labouring under that affection, whilst, at the same time, women after aborting, usually soon again become pregnant, there being no such great lacteal determinations to the mammæ, as occur after parturition at the full period, and which seem then usually to interfere with the early repetition of conception.

Lastly, Dr. Simpson offered some observations on the introduction of the sponge tent, into the os of the pregnant uterus, in certain conditions in connection with abortion, and as a means of inducing premature labour. When abortion was inevitable, and the hemorrhage great, a small expanding sponge tent passed into the os uteri, was more effectual than a large vaginal plug. It at the same time opened up the os uteri, so as to allow of the more easy escape of the contents, whilst uterine contractions were, in most instances, ultimately induced by its presence. For the same reasons it was often a valuable means of both opening up the os uteri and exciting the necessary degree of uterine action in those occasionally perplexing cases where, in abortion, the embryo escapes, but the secundines are long retained. Dr. S. had employed the same simple means in inducing premature labour, and spoke of the advantages of it in comparison with the various other measures that had been proposed for that object. He found that the tent, when made and introduced in the mode already stated,

required no vaginal plug or other means to hold it *in situ*. By its use the first stage of labour, or the dilatation of the os uteri, could, in a great degree, be advanced before the labour itself actually began.—*Lond. and Edin. Month. Journ. Med. Sci.*, Aug., 1844.

81. *Scirrhus of the Uterus*.—Dr. SCOTT read to the *Medico-Chirurg. Society of Edinburgh*, May 1st, a case of scirrhus of the uterus, in which none of the usual signs of that disease had appeared, but which, two years previous to death, presented all the symptoms of spinal neuralgia, constant cough, without any indication of disease of the lungs, vomiting of food, exquisite pain, almost to fainting on pressure of the spine, and progressive emaciation.

The disease terminated fatally from slight uterine hemorrhage. On examination, the lungs and stomach were found healthy; the uterus was scirrhus and enlarged, but without ulceration. Dr. Scott considered it, in connection with the papers he had formerly communicated to the society, as throwing great light on the subject of spinal neuralgia in general.—*Ibid.*

82. *Tumours on the Fœtal surface of the Placenta*.—M. DANYAN gives two cases of this rare pathological occurrence. His patients were delivered without any difficulty. On the fœtal surface of the placenta, underneath the chorion and the amnion membranes, he found a tumour in one instance 20 centimetres, (eight inches,) in the other 13 centimetres (five inches) in length. The tumours, in both cases, rested on the fœtal surface of the placenta, to which they adhered by vascular ramifications, and by very slight adhesions. The tumours were nourished by vessels proceeding from the umbilical cord itself, and from the vascular network of the placenta. Their tissue was firm, homogeneous, like scirrhus tissue, and grated underneath the scalpel. M. Danyan thinks that these productions were the result of organized sanguineous coagula.—*Lancet*, July 6th, 1834, from *Journal de Chirurgie*.

83. *Pelvic Inflammation, with Abscess, occurring after delivery*. By JOHN C. W. LEVER, (*Guy's Hospital Reports*, April, 1844.) In this very interesting paper, Dr. L. relates nine cases of pelvic inflammation, with abscess, occurring after delivery, and presents some remarks on the disease, deduced from a comparison of those cases.

"1. *Seat and origin of the disease*.—It is difficult to decide whether the disease commenced in the uterine appendages, strictly so called, or whether the cellular structure was primarily affected; but that the cellular is involved, Dr. Lever thinks is very clearly shown.

"2. *Causes*.—This disease may follow an attack of acute inflammation; or it may remain as the sequent of puerperal fever. In the greater number of the previous cases, anomalous symptoms displayed themselves soon after delivery. Cold, falls, blows, &c., are said to have produced the disease. In but two cases were the labours unnatural; in two cases the right side of the pelvis was affected; in five, the left; and in two, matter was evacuated from both sides: in one, the right preceding the left; in the other, the pus was evacuated from the left side externally, and from the right side, through the bowel.

"3. *Symptoms: General*.—The symptoms may commence a day or two after delivery, or they may supervene some days or even weeks after labour. The disease is mostly preceded by rigors, or a sensation of coldness over the surface, followed by heat of skin, quickened circulation, and pain in the region of the pelvis. The febrile paroxysms may remit, but their intervals of recurrence are at varying intervals. The uneasiness and pelvic pain continue, and, as the disease progresses, increase: usually there is some degree of stiffness in the side affected, and not unfrequently pain in the course of the vessels of the thigh and leg: this may proceed to the development of phlegmasia dolens. The pulse is seldom below 100—110: the tongue remains loaded: there are frequent calls to pass the urine, which is scanty and high-coloured: at one time there is con-

stipation of the bowels, at another diarrhœa associated with tenesmus; and the secretion of milk is usually scant, or altogether suppressed.

"These symptoms may continue for an indefinite period; when, if the disease be overlooked, or if the remedies employed do not succeed in checking its progress, they are followed by the attendant signs of suppuration, and the matter may be evacuated either by an artificial or natural opening.

"*Local.*—The patient usually directs the accoucheur to the seat of the affection: in some cases, a swelling is readily seen; in others, there is an appearance of fulness on one or both sides. This will be found very sensitive; and the patient will, with difficulty, be persuaded to allow a careful examination with the hand. When this is done, the whole of the iliac region, on the side affected, may be found of 'a brawny hardness;' sometimes prominent, but usually very tender to the touch. This hardness has, in some cases, been found to extend as high as the umbilicus, and as forward as the linea alba. In other cases, the tumour is seated more deeply in the pelvis; and is then not so readily defined, is less movable, and will bear superficial pressure: but if the hand be pressed deeply into the cavity of the pelvis, the patient will immediately shrink. If a vaginal examination be made, in some cases, nothing abnormal is detected; the canal may be cool; there may be no tumefaction; and the uterus may be moved without inducing great suffering: although, in by far the greater number of cases I have seen, there has been, to use Dr. Simpson's words, 'a morbid permanence of the state of puerperal hypertrophy;' and, as a general rule, it will be found that wherever pelvic inflammation occurs soon after delivery, a long period will elapse before the uterus returns to its original state. In other females, the upper part and side of the vagina will be found hard, tender, firm and inelastic; and, by pressing upon the swelling felt through the abdominal parietes with one hand, and keeping the forefinger of the other in the canal, we are able to satisfy ourselves that the hardness and swelling felt in both situations arise from one and the same cause. Frequently, there is some lateral displacement of the uterus. On examination per rectum, the swelling is, in some instances, found to encroach upon the bowels; and this will explain both the occurrence of tenesmus and hemorrhoids, as well as the occasional discharge of the contents of these abscesses per anum.

"4. *Diagnosis.*—(1.) *From inflammation and abscess of the abdominal walls.*—I have seen three cases of inflammation, followed by suppuration taking place in the parietes of the abdomen, after delivery; this has occurred from a giving way of some of the muscular fibres, or tendinous expansion, during violent efforts. The patients were sensible of the injury, and at the time of its occurrence made great complaint. On the other hand, I have seen abscess of the abdominal parietes occur without any such assignable cause; and it will be well, therefore, to mark the diagnosis between simple abscess of the abdominal walls and those collections of matter which issue from the pelvis behind, and external to the peritoneum, presenting themselves in either iliac region. In the early stage of the latter, the skin, as well as the muscular parietes, may be readily rolled over the tumour; evidently demonstrating their non-connection: while, if the abscess be seated in the abdominal walls, by moving the one we move the other. This method of diagnosis is most satisfactorily applied when the patient is in a prone position.

"(2.) *A morbid permanence of the state of puerperal hypertrophy of the uterus* may be mistaken for pelvic abscess. I have already alluded to the enlarged condition of the uterus which usually persists in women who have suffered from pelvic inflammation; and I have observed the same circumstance in females who have recovered from puerperal fever. Such swellings are not always confined to the central line, but may extend into either iliac region, and they may be associated with inflammatory effusions into the pelvis. In the diagnosis of such cases, valuable assistance will be derived from the employment of Professor Simpson's uterine bougie: by its aid the situation and size of the uterus may be determined, its mobility or fixity ascertained, and the locality of the inflammatory effusion decided.

"(3.) *Feculent collections*.—In puerperal women we sometimes meet with tumours in either iliac fossa: on the one side arising from a collection of feces in the cæcum; and on the other, from a similar collection in the sigmoid flexure of the colon: and such collections, by an inexperienced and careless observer, might be mistaken for inflammatory swellings. The early period at which they occur after delivery; the tympanitic condition of the abdomen; the frequent expulsions of flatus, both by mouth and anus; the frequent colicky pains; the occasional vomiting; the loaded tongue; the state of the pulse; will enable us to frame a correct diagnosis. And further, upon inquiry, we shall find that for some time the patient's bowels have been in a constipated state; while the exhibition of purgatives, and the administration of cathartic glysters, by their effects will remove all doubt from the case.

"(4.) *Typhlo-enteritis*.—I need scarcely dwell upon the means of diagnosing pelvic abscess from inflammation of the cæcum, and the cellular membrane external to it. Here the symptoms of intestinal disturbance will be found at the commencement; the constitutional symptoms are more active, and soon become typhoid. The tumour itself also gives to the hand of the examiner a different sensation from that felt in pelvic inflammatory effusions; in the former, also, a "craquement" is frequently detected. Still, it must be admitted, that cases are recorded in which the cæcum and its cellular bed have become secondarily affected.

"(5.) *From abscess behind the flexors of the hip*.—Inflammation and suppuration are occasionally met with behind the psoas and iliacus muscles, and might, by an inattentive observer, be mistaken for the disease under consideration. In the former, however, the pain is more acute, and is increased by the slightest motion of the hip-joint: there is pain also in the knee: the patient lies with her thigh and leg flexed; she cannot allow the limb to hang down; neither can she bear the slightest weight on the foot of the side affected.

"(6.) *From sciatica*.—Dr. Churchill states he has known this affection mistaken for sciatica; but surely, if a careful internal and external examination be made, such an error cannot occur."

5. *Termination*.—This, Dr. Lever remarks, is by *resolution*, but most frequently *suppuration*. 1, The abscesses evacuate themselves, externally; 2, into the cavity of the peritoneum; 3, into the vagina; 4, into the uterus; 5, into the bladder; 6, into the intestinal tube, and 7, into the surrounding cellular tissue.

"6. The *sequelæ* of the disease are: 1. *Immobility of the uterus*. The uterus is bound down, and rendered incapable of expansion; so that if gestation occur, the ovum is prematurely cast off, and in this way may give rise to a succession of abortions. During gestation, brief though it be, the patient suffers much from pain in the region of the uterus, and the abortion is attended with an unusual degree of suffering. 2. An impervious condition of the Fallopian tube. If this exists only on one side, the generative faculty will not be interfered with. 3. *Ovarian disease*. According to Dr. L.'s experience, this is a very uncommon result.

"7. *Treatment*.—In the treatment of this latent affection, our first object," says Dr. L., "should be to procure resolution: for this purpose, heroic measures are not required, as the disease is usually found in patients whose constitutional powers are much depressed, and demand mild and cautious treatment. General blood-letting has not been required in any case that has fallen under my notice; whilst, in most, the abstraction of blood by leeches, repeated, if necessary, two or three times, has been attended with marked advantage: in my opinion, it is better to repeat the application of leeches than to apply a large number at one time. They may be applied either to the seat of pain and swelling, or to the vagina by means of the speculum; whilst the flow of blood may be encouraged by the constant application of warm cataplasms, or the injection of the decoction of anemid, or papaveris: while blood is thus drawn from the part affected, the milder mercurial preparations should be exhibited in small but repeated doses, but just sufficient to affect the system. Two or three grains of blue pill, combined with the extract of conium, or the hyd. c. creta, with Dover's powder, may

be given each night at bedtime, or night and morning; but the effects of this medicine must be closely watched, for its exhibition must be discontinued so soon as the red line is seen along the margin of the gums. While pursuing this plan of treatment, the secretions should be attended to; the kidneys must be kept in action; the bowels free; and at the commencement of the disease, diaphoresis may be promoted.

"From the record of the cases it will be seen that the patients frequently suffer from distressing tenesmus: this may be remedied by the use of the enema amyli, to which some syrup of poppies or tincture of opium has been added; or by the introduction of an opiate suppository.

"In some cases, notwithstanding the early employment of legitimate means to effect resolution, and in others, from the first moment of our being called in, the symptoms plainly indicate the formation of pus. And here our object should be twofold: 1. The promotion of suppuration and evacuation of the matter; and 2dly. The maintenance of the constitutional powers.

"1. The first object will be accelerated by the continued application of medicated poultices and fomentations, which soothe the pain and lessen the patient's sufferings. When the symptoms plainly indicate the formation of matter, and fluctuation is evident, the abscess should be opened: this may be done externally, through the abdominal parietes; internally, through the vagina, by means of the speculum and a guarded lancet; or through the rectum by means of a trocar, as in Dr. Simpson's case.

"M. Martin recommends the application of caustic potass to the abdominal parietes, for the double purpose of having an external opening, and securing previous adhesion of the containing sac to the abdominal walls. This method of practice appears to have been very successful in his hands; but still there are cases to which its inapplicability must be obvious.\*

"In some of the cases related, the patient's sufferings would have been diminished had an earlier opening been made.

"2. The constitutional powers must be maintained by a generous, nutritious diet, porter, wine, &c.; the administration of tonics and sedatives.

"Where inflammation takes place in the course of the veins and absorbents, leeching along the line of the inflamed vessels, followed by hot spirit fomentations, will be found of service; taking care, at the same time, to allay pain and irritation by sedatives, and to support the system by mild tonics.

"In some cases, where the inflammation does not proceed so far as suppuration, and in others, where pus has formed and has been evacuated, there will remain considerable induration of the affected structures. Its absorption will be promoted by the exhibition of the pot. iodid. two or three times a day, in the dec. sarzæ c., or the dec. cinchonæ, and by the application of blisters.

"The continuance of nursing is by no means an unimportant question in the treatment. In the majority of cases, the secretion of milk is scanty, and insufficient to satisfy the cravings of the child: If, therefore, we find the patient's strength decidedly deteriorated by nursing, we should at once forbid its continuance, and commit the infant to the care of a wet-nurse; but if, although the secretion be scanty, the patient's health does not appear to suffer, we may permit her to suckle her child."

We may refer, for some further information respecting this disease, to the interesting paper of Dr. Churchill, analyzed in our number for January last. (P. 226, *et seq.*)

\* See Dr. Simpson's case, *Edin. Med. and Surg. Journal*, 1843, pp. 1013-14.